



A U S T R A L I A N

SOCIAL TRENDS

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A U S T R A L I A N S O C I A L T R E N D S 1 9 9 5

W. McLennan
Australian Statistician

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Preface

This is the second edition of **AUSTRALIAN SOCIAL TRENDS**, an annual series which monitors changes in Australian social conditions over time. It forms part of the ongoing commitment of the Australian Bureau of Statistics to assist and encourage informed decision-making, research and discussion within governments and the community.

Official statistics provide an indispensable element in the information system of our society. By bringing together statistics and indicators for a range of areas of social concern from a variety of sources, **AUSTRALIAN SOCIAL TRENDS** contributes to this information system. It provides a statistical perspective on Australia's people, their activities, characteristics and social well-being.

Like the first edition, **AUSTRALIAN SOCIAL TRENDS 1995** explores a set of key social issues. Many of these issues are ongoing concerns, such as youth unemployment, employee training, the implications of increasing life expectancy, alcohol use, and trends in marriage and divorce. Others represent key emerging social issues. In the 1990s our homes are increasingly the focus of great social change. This is reflected in reviews on home-based higher education, home workers, leisure at home, household crime and trends in housing construction. The reviews aim to tell the story behind the numbers. In bringing data together, the reviews highlight connections and relationships. They raise questions as well as giving answers.

The report contains a special feature chapter on culture and leisure in Australia. Future editions will continue to have special features, new reviews, and updated and expanded summary tables and international comparisons. With time, this annual series will provide an invaluable historical perspective on social change in Australia.

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June 1995

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In addition to the valuable advice and comments provided by many ABS staff members, the project team also wishes to acknowledge the external contributions of Mike Giles, the Bureau of Immigration, Multicultural and Population Research, and Open Learning Australia.

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Symbols

The following symbols used in tables mean:

n.a.	not available
n.y.a.	not yet available
- .	not applicable
—	nil or rounded to zero
p	preliminary — figures or series subject to revision
*	subject to high sampling variability
**	data suppressed due to unacceptably high sampling variability
r	figures or series revised since previous edition

Other usages

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

Unless otherwise stated, where source data used in the calculation of percentages included a non-response category (i.e. not stated), it has been excluded from the calculations. Total numbers shown with such percentages include the number of non-responses.

Inquiries about these statistics

Inquiries about the content and interpretation of statistics in this publication should be addressed to:

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Inquiries about the availability of more recent data from ABS should be directed to Information Services in your nearest ABS office (see p. 183).

ABS publications and services

A complete list of ABS publications produced in Canberra and each of the state offices is contained in the *ABS Catalogue of Publications and Products* (1101.0) which is available from any ABS office.

In many cases, the ABS can also provide information which is not published or which is historical or compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in your nearest ABS office (see p. 183).

Population

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The emphasis placed on maintaining cultural heritage varies widely between different groups of second generation Australians.

POPULATION GROWTH

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Net overseas migration in 1993 was the lowest since 1976. Only five years earlier, in 1988, net migration had been at its post-war high.

POPULATION DISTRIBUTION

Internal migration.....16

In 1993 Queensland had a record net gain of 53,000 people from interstate, while Victoria had a record net loss of 32,000 people.

POPULATION PROJECTIONS

Projections of the working age population.....21

Australia's working age population has prime responsibility for supporting children and older people. From now until 2011 working age people will continue to represent around 67% of the population. After 2011 their representation is projected to decline.

Population — national summary

COMPOSITION	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994(a)
Total population	'000	15 579	15 788	16 018	16 264	16 532	16 814	17 065	17 284	17 483	17 656	17 843
Male population	'000	7 778	7 883	8 000	8 118	8 249	8 388	8 511	8 615	8 711	8 796	8 887
Female population	'000	7 801	7 906	8 018	8 146	8 283	8 427	8 554	8 669	8 772	8 861	8 956
Median age	years	30.5	30.8	31.1	31.3	31.6	31.8	32.1	32.4	32.7	33.0	33.4
Proportion of population aged 0-14 years	%	24.0	23.6	23.1	22.7	22.4	22.2	22.0	21.9	21.8	21.7	21.5
Proportion of population aged 65 years and over	%	10.1	10.3	10.5	10.7	10.8	11.0	11.1	11.3	11.5	11.7	11.8
Overseas born (of population)	%	21.0	21.1	21.2	21.5	22.0	22.4	22.8	22.9	23.0	22.8	22.6
Born in non-English speaking countries (of population)	%	11.6	11.7	11.8	12.1	12.4	12.8	13.1	13.3	13.5	13.5	13.6
Living in capital cities (of population)	%	63.5	63.5	63.8	63.9	63.9	63.8	63.7	63.6	63.4	63.4	n.y.a.
GROWTH	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Growth rate	%	1.21	1.34	1.46	1.53	1.65	1.71	1.49	1.28	1.19	0.96	1.06
Net overseas migration rate	%	0.32	0.47	0.64	0.78	0.92	0.95	0.74	0.51	0.4	0.17	0.28
Rate of natural increase	%	0.84	0.82	0.78	0.79	0.77	0.79	0.79	0.83	0.79	0.78	0.77
Net reproduction rate	no.	0.90	0.91	0.90	0.88	0.88	0.88	0.91	0.89	0.91	0.90	n.y.a.
Crude birth rate (per 1,000 population)	no.	15.3	15.4	15.2	15.0	14.9	14.9	15.4	14.9	15.1	14.7	n.y.a.
Crude death rate (per 1,000 population)	no.	7.2	7.4	7.2	7.2	7.2	7.4	7.0	6.9	7.1	6.9	n.y.a.
Permanent and long-term arrivals	'000	145.3	163.3	186.4	204.5	242.3	249.9	231.9	236.4	234.2	203.8	207.4
Refugee arrivals	'000	14.8	14.9	11.8	11.1	11.1	10.9	11.9	7.7	7.2	10.9	11.4
Permanent and long-term departures	'000	98.8	95.3	92.5	95.3	99.0	112.6	128.1	141.6	144.3	141.1	140.0
PROJECTIONS-SERIES A	Units	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	
Total population	'000	18 208	19 170	20 096	20 952	21 760	22 528	23 241	23 874	24 410	24 858	
Male population	'000	9 065	9 538	9 990	10 405	10 791	11 153	11 482	11 768	12 007	12 210	
Female population	'000	6 143	9 632	10 105	10 547	10 969	11 375	11 759	12 106	12 403	12 648	
Median age	years	34.0	35.4	36.6	38.0	39.0	39.7	40.4	40.9	41.4	41.8	
Proportion of population aged 0-14 years	%	12.4	20.7	20.1	19.3	18.6	18.1	17.9	17.7	17.5	17.3	
Proportion of population aged 65 years and over	%	12.1	12.3	12.8	13.8	15.6	17.3	19.0	20.3	21.3	22.0	
5-year average growth rate	%	1.05	1.03	0.95	0.84	0.76	0.70	0.63	0.54	0.45	0.36	

(a) Includes Christmas and Cocos Islands.

Reference periods:

Population estimates and projections are at 30 June. Population growth figures (except birth, death and net reproduction rates) are for the year ended 30 June.

Population — state summary

COMPOSITION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT(a)	Aust.(b)
Total population	'000	1994	6 051	4 476	3 197	1 470	1 702	472	171	301	17 843
Male population	'000	1994	3 008	2 217	1 603	730	855	234	88	151	8 887
Female population	'000	1994	3 044	2 260	1 594	740	847	238	83	150	8 956
Median age	years	1994	33.8	33.6	32.7	34.6	32.6	33.7	28.0	30.4	33.4
Proportion of population aged 0–14 years	%	1994	21.3	21.0	22.1	20.5	22.6	22.6	27.9	22.2	21.5
Proportion of population aged 65 years and over	%	1994	12.4	12.1	11.2	13.6	10.2	12.4	3.1	6.9	11.8
Overseas born (of population)	%	1991	23.1	24.4	16.8	22.5	29.3	10.7	18.1	23.6	22.9
Born in non-English speaking countries (of population)	%	1991	15.2	16.9	6.9	10.8	12.0	4.0	9.3	14.1	13.3
Living in capital city (of population)	%	1993	61.9	71.4	45.6	73.2	72.9	41.0	46.0	99.6	63.4
GROWTH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT(a)	Aust.(b)
Growth rate	%	1993–94	0.90	0.27	2.60	0.47	1.52	0.21	1.08	0.67	1.06
Net overseas migration rate	%	1993–94	0.38	0.25	0.18	0.15	0.42	0.05	0.25	-0.12	0.28
Net interstate migration rate	%	1993–94	-0.23	-0.71	1.57	-0.24	0.22	-0.46	-0.89	-0.05	..
Rate of natural increase	%	1993–94	0.74	0.73	0.84	0.56	0.88	0.62	1.72	1.09	0.77
Net reproduction rate	no.	1993	0.92	0.86	0.91	0.86	0.90	0.92	1.06	0.83	0.90
Crude birth rate (per 1,000 population)	no.	1993	14.8	14.4	14.9	13.8	15.0	14.4	21.1	16.2	14.7
Crude death rate (per 1,000 population)	no.	1993	7.2	7.0	6.4	7.9	6.2	7.7	4.4	4.1	6.9
Permanent and long-term arrivals	'000	1993–94	87.8	46.9	30.1	9.7	24.1	1.9	1.5	5.2	207.4
Refugee arrivals	'000	1993–94	5.0	3.8	0.7	0.5	1.1	0.1	0.0	0.1	11.4
Interstate arrivals	'000	1993–94	79.8	46.3	108.3	24.7	29.0	9.7	15.2	17.0	..
Permanent and long-term departures	'000	1993–94	57.1	31.6	21.8	6.7	14.9	1.6	1.2	5.1	140.0
Interstate departures	'000	1993–94	92.5	78.6	59.7	28.3	25.1	11.8	16.7	17.2	..
PROJECTIONS—SERIES A	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT(a)	Aust.(b)
Total population	'000	2041	7 941	5 282	5 854	1 622	2 786	538	295	540	24 858
Male population	'000	2041	3 896	2 558	2 903	799	1 367	266	151	270	12 210
Female population	'000	2041	4 045	2 724	2 951	823	1 419	272	144	270	12 648
Median age	years	2041	41.7	42.6	41.2	44.8	41.0	45.0	34.8	39.1	41.8
Proportion of population aged 0–14 years	%	2041	17.6	16.8	17.6	15.5	17.7	16.4	21.6	17.5	17.3
Proportion of population aged 65 years and over	%	2041	22.2	23.3	21.0	25.0	20.8	25.0	13.9	18.6	22.0

(a) In 1994, Jervis Bay territory was excluded.

(b) In 1994, Christmas and Cocos Islands were included.

Reference periods:

Population estimates (except overseas born and born in non-English speaking countries which are Census based) and projections are for 30 June.

Population — definitions and references

Crude birth rate — number of live births registered during the calendar year per 1,000 of the mean estimated resident population.
Reference: Births, Australia (3301.0)

Crude death rate — number of deaths registered during the calendar year per 1,000 of the mean estimated resident population.
Reference: Deaths, Australia (3302.0)

Growth rate — change in the population during the year expressed as a proportion (per cent) of the population at the beginning of the year.
Reference: Australian Demographic Statistics (3101.0)

Interstate arrivals — arrivals from other states or territories of Australia who intend to stay permanently.
Reference: Australian Demographic Statistics (3101.0)

Interstate departures — permanent departures to other states or territories of Australia.
Reference: Australian Demographic Statistics (3101.0)

Long-term arrivals — persons arriving from overseas who intend to stay in Australia for one year or more and Australian residents returning from an overseas visit of one year or more.
Reference: Overseas Arrivals and Departures, Australia (3404.0)

Long-term departures — departures of Australian residents who intend to stay temporarily overseas for one year or more and departures of visitors who had stayed in Australia for one year or more.
Reference: Overseas Arrivals and Departures, Australia (3404.0)

Median age — the age at which half the population is older and half is younger.
Reference: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0)

Net interstate migration rate — interstate arrivals minus interstate departures during the year, expressed as a proportion (per cent) of the population at the beginning of the year.
Reference: Australian Demographic Statistics (3101.0)

Net overseas migration rate — permanent and long-term arrivals minus permanent and long-term departures during the year expressed as a proportion (per cent) of the population at the beginning of the year.
Reference: Australian Demographic Statistics (3101.0)

Net reproduction rate — the number of daughters that a cohort of newborn female babies will bear during their lifetime, assuming fixed age-specific birth rates and a fixed set of mortality rates.
Reference: Australian Demographic Statistics (3101.0)

Non-English speaking countries — all overseas countries except United Kingdom, Ireland, New Zealand, South Africa, Canada and the United States of America.
Reference: Estimated Resident Population by Country of Birth, Age and Sex, Australia (3221.0)

Permanent arrivals — persons arriving from overseas with the intention of settling permanently in Australia. It includes those with migrant visas, (regardless of stated intended period of stay), New Zealand citizens who indicate an intention to settle, and those who are otherwise eligible to settle, eg overseas born children of Australian citizens.
Reference: Overseas Arrivals and Departures, Australia (3404.0)

Permanent departures — Australian residents, including former settlers, who on departure state that they do not intend to return to Australia.
Reference: Overseas Arrivals and Departures, Australia (3404.0)

Population projections — the ABS produces population projections using the cohort component method which takes a base year population for each sex by single years of age and advances it year by year by applying assumptions about future mortality and migration. Assumed age-specific fertility rates are applied to the female populations of child-bearing ages to provide the new cohort of births. This procedure is repeated for each year in the projection period for each state and territory and for Australia. The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The assumptions underlying Series A most closely reflect prevailing trends and comprise: declining rates of mortality; a constant level of fertility (total fertility rate of 1.88 for Australia); low levels of overseas migration (rising to 70,000 per year by the year 2000 then remaining constant); and continuing high levels of interstate migration.
Reference: Projections of the Populations of Australia, States and Territories, 1993 to 2041 (3222.0)

Rate of natural increase — the excess of births over deaths during the year expressed as a proportion (per cent) of the population at the beginning of the year.
Reference: Australian Demographic Statistics (3101.0)

Refugee arrivals — comprises: those who arrive under the refugee program (which provides protection for people who have fled their country because of persecution); those who arrive under the humanitarian programs (those who leave their country because of significant discrimination amounting to gross violation of human rights); and those who arrive under the Special Assistance Category (groups determined by the Minister to be of special concern to Australia and in real need but who do not come under the traditional humanitarian categories. It includes those externally displaced people who have close family links with Australia).
Reference: Bureau of Immigration and Population Research *Australian Immigration Consolidated Statistics*

Second generation Australians

COMPOSITION

The emphasis placed on maintaining cultural heritage varies widely between different groups of second generation Australians.

In 1991, 19% of Australians (3.1 million people) had been born in Australia and had at least one overseas born parent, ie they were second generation Australians¹. A further 23% (3.8 million people) were overseas born or first generation Australians. All first generation Australians bring some of the culture of their homeland with them and contribute to the diverse and varied cultures which have been an integral part of Australia's development as a nation. In addition, they may transmit their cultural heritage to their children thus further enriching Australian society.

The variety and size of birthplace groups of second generation Australians reflect past migration and intermarriage patterns. In long established migration groups, such as those from the UK and Ireland and from northern and southern Europe, second generation

Ethnicity

Ethnicity is a complex concept which encompasses elements of regional, cultural, lingual, religious and ancestral identity. The ABS collects data on birthplace, birthplace of parents, language used at home and religious affiliation.

The focus of this review is second generation Australians, ie people born in Australia who have at least one overseas born parent. The emphasis is on their similarities to, and differences from, their parents. Second generation Australians have been classified to a birthplace group on the basis of the country of birth of their parent(s). This means that people whose parents were born in different overseas countries will be counted in two birthplace groups and their characteristics will be compared separately to those of both their mother's and father's birthplace groups.

Birthplace groups^(a), 1991

Country	Second generation Australians		Overseas born	Total in birthplace group
	Proportion of birthplace group	Total		
	%	'000	'000	'000
UK	56.6	1 460.6	1 121.5	2 582.1
Italy	56.2	327.3	254.8	582.1
NZ	37.8	167.6	276.1	443.6
Greece	52.6	151.2	136.3	287.5
Netherlands	59.3	139.7	95.8	235.5
Germany	54.5	137.7	114.9	252.6
Yugoslavia	42.8	120.7	161.1	281.7
Ireland	64.5	95.2	52.4	147.6
Malta	58.7	76.5	53.8	130.3
Lebanon	49.4	67.5	69.0	136.5
Poland	43.6	53.3	68.9	122.2
USSR	49.0	42.5	44.2	86.8
India	37.4	36.8	61.6	98.4
USA	38.8	32.0	50.6	82.6
China	26.7	28.7	78.8	107.5
Viet Nam	17.1	25.2	122.3	147.5
All overseas countries	45.5	3 139.3	3 756.5	6 895.8

(a) A birthplace group comprises all people in Australia who were born in a specific country, and those who were born in Australia and had one or both parents born in the specific country. If a person's parents were born in different overseas countries, they will be in two birthplace groups. Components may, therefore, not add to totals.

Source: Census of Population and Housing

Australians form more than half of their total birthplace group. In more recently arrived groups, such as those born in Viet Nam, second generation Australians form a smaller part of their birthplace group.

Population structure

In 1947, less than 10% of the population were overseas born. This increased to 20% in 1976 and to 24% by 1991. Along with this increase in the overseas born population the second generation Australian population increased to 20% by 1976 and has remained relatively stable since.

Australia's immigration rate increased after World War II (see *Net overseas migration* pp. 11-15). Consequently the second generation population increased and therefore has a young age structure. In 1991, only 21% of second generation Australians were aged 45 or over.

Until the late 1940s, there was a deliberate policy to discourage settlers from countries whose culture was perceived as being too dissimilar to the Australian culture of the time (see *Australian Social Trends 1994* pp. 9-12 *Birthplaces of Australia's settlers*). This resulted in only 6% of second generation Australians with parents born in non-English

speaking countries being aged 45 or over in 1991.

As the source countries of Australia's immigration have changed over time, so has the mix of the second generation population. Between 1976 and 1991 the number of second generation Australians with parents born in the UK or Ireland increased by 18% to 1.6 million. Over the same period, the most rapidly growing of all second generation populations was Yugoslavian, which grew by 68%.

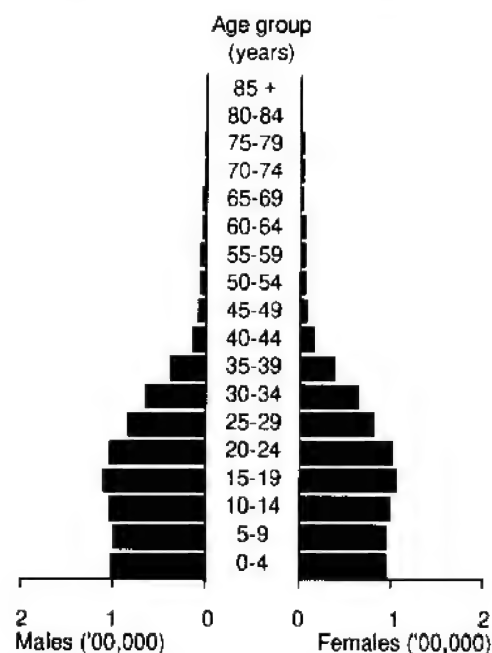
Marriage

The proportions of first and second generation Australians who marry within their birthplace group vary, depending on the birthplace group. Much of this variation is due to cultural differences between groups but the age structure and relative size of the groups also play a part. For example, people with Greek or Lebanese backgrounds are more likely to marry within their birthplace groups than people with German or Dutch backgrounds.

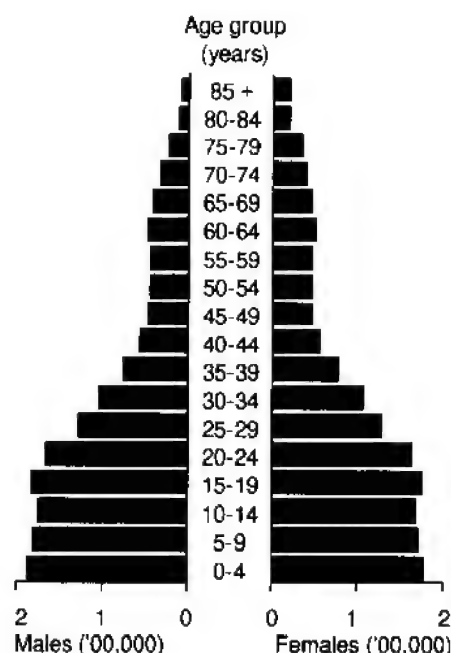
In 1993, 73% of second generation Australian women with both parents born in Lebanon married within their birthplace group compared to 58% of such men. Similarly,

Age and sex structure of second generation Australians, 1991

Second generation Australians with parent(s) born in non-English speaking countries



All second generation Australians



Source: Census of Population and Housing

Second generation Australians^(a) marrying within their birthplace group, 1993

Birthplace of both parents	Men	Women
	%	%
Greece	61.6	63.7
Lebanon	58.5	73.3
Italy	48.3	53.8
China	47.8	36.7
Malta	29.9	33.3
UK & Ireland	23.6	25.4
The former USSR ^(b)	16.2	7.5
Poland	14.0	8.9
Netherlands	11.6	12.8
Germany	4.5	3.9

(a) People born in Australia with both parents born in the specified country.

(b) Includes the Baltic States.

Source: Marriage Registrations

Australian born women with both parents born in Greece, Italy, Malta, UK and Ireland, or the Netherlands were more likely to marry within their birthplace groups than Australian born men from these backgrounds.

In contrast, second generation Australian men with both parents born in China, the former USSR and Baltic States, Poland or Germany were more likely to marry within their birthplace group than second generation Australian women from these backgrounds.

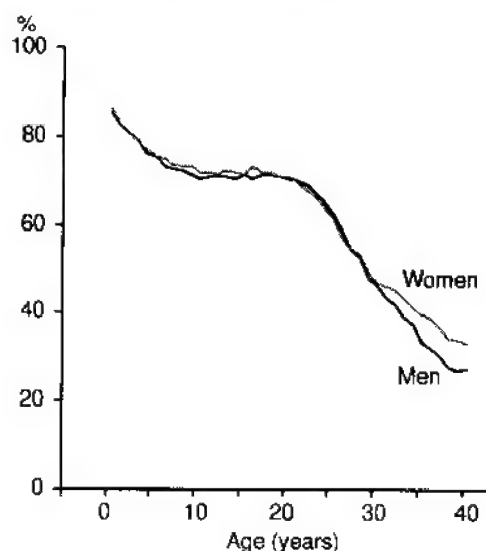
A quarter of Australian born men and women with both parents born in the UK or Ireland married people within their birthplace group. This was four times the level expected for men, and three times for women, given the size and age structure of the birthplace group.

Language

Second generation Australians with both parents born in non-English speaking countries are more likely to speak English at home the older they are. Up to the age of 20, over 70% of these people spoke a language other than English at home in 1991. This is partly because they are more likely to be living with their parents at this age than at older ages.

Over the age of 30, women were more likely to speak a language other than English at home than men. This reflects women's lower

Second generation Australians^(a) who spoke a language other than English at home, 1991



(a) People born in Australia with both parents born in non-English speaking countries.

Source: Census of Population and Housing

labour force participation and their greater likelihood of having a caring responsibility for ageing parents.

Second generation Australians were much more likely to speak their parents' language if both parents spoke the same language. Over 90% of second generation Australians with both parents born in Viet Nam, Lebanon or Greece spoke a language other than English at home. This proportion fell if only one parent was born in the country. In all birthplace groups, people were more likely to speak their mother's language than their father's.

Second generation Australians who spoke a language other than English at home, 1991

Birthplace of parents	Parents born in selected country		
	Mother only	Father only	Both parents
	%	%	%
Viet Nam	75.5	64.8	96.0
Lebanon	65.9	48.1	90.4
Greece	61.0	47.2	90.3
Yugoslavia	31.3	22.6	80.4
China	46.6	37.0	78.0
Italy	29.4	21.5	67.6
Poland	20.2	11.5	42.9
USSR	16.2	12.2	36.2
Malta	8.4	6.6	35.8
India	4.8	4.6	26.9
Germany	10.5	6.1	26.5
Netherlands	3.5	2.1	10.6

Source: Census of Population and Housing

Religion

Religious affiliation is closely related to birthplace group. For second generation Australians the relationship is generally not as strong as it is for the first generation. However, first and second generations of the Greek, Irish, Italian, Lebanese and Netherlands birthplace groups have similar patterns of religious affiliations.

In Australia most Italian born are Catholic and most Greek born are Greek Orthodox. While this reflects the religious mix in the country of birth it also reflects migration patterns. For example, Catholics outnumber Hindus among the Indian born population in Australia. However, in 1981, the most recent data available, 83% of the population of India were Hindu, and only 2% were Christian².

59% of people in Australia born in China stated that they had no religion. Similar proportions were reported by people born in Hong Kong and Japan. This may be because they perceive their belief systems as philosophies rather than religions. People with both parents born in China were much more likely than the Chinese born to have a religion, especially a Christian religion. 44% of second generation Australians with Chinese parents were Christian, compared to 22% of Chinese born.

Religion of birthplace groups, 1991

Country	Religion	Overseas born	Second generation(a)
		%	%
China	No religion	59.4	40.4
Germany	Lutheran	30.6	27.3
	Catholic	29.6	23.3
Greece	Greek Orthodox	93.5	92.1
	Catholic	41.4	49.5
India	Hindu	18.7	15.7
	Catholic	74.0	72.8
Italy	Catholic	93.1	92.2
Lebanon	Catholic	40.2	42.4
	Islam	37.0	39.0
Netherlands	Catholic	35.2	37.4
Poland	Catholic	75.8	69.7
UK	Anglican	44.0	39.2
USSR	Catholic	23.9	29.2
	Lutheran	23.1	18.9
Viet Nam	Buddhist	38.3	28.1

(a) Both parents born in selected country.

Source: Census of Population and Housing

Industry concentration

Some second generation Australians are concentrated in particular industries. This is particularly so among those whose fathers were born in Italy or Greece. People with Italian born fathers made up 2% of the employed population in 1991, but 12% of people employed in the sugar cane industry. Similarly, people with Greek born fathers made up 1% of employed people but 3% of those in the take-away food industry. In contrast second generation Australians with fathers born in most other countries did not show such concentrations.

The Greek and Italian birthplace groups form a large minority in certain industries because of their tendency to work in family businesses and because of historical and cultural patterns. In 1991, 25% of people working in fruit and vegetable stores were from the Italian birthplace group and 9% of people working in fish shops, take-away foods and milk bars were from the Greek birthplace group. Both of these industries employed relatively high proportions of both the first and second generations. Both these industries included large numbers of family businesses.

Industry^(a) with highest concentration of second generation Australians, 1991

Birthplace of father	% of all employed	Most concentrated industry	% of industry
	%		%
Italy	2.1	Sugar cane	12.0
UK	4.9	Defence	6.8
Greece	0.9	Take-away food ^(b)	3.0
Netherlands	0.7	Police	1.1
Yugoslavia	0.5	Department stores	1.1
Germany	0.5	Defence	0.9
New Zealand	0.3	Grocers ^(c)	0.4

(a) Industries employing over 500 second generation Australians from the selected birthplace group.

(b) Includes fish shops and milk bars.

(c) Includes confectioners and tobacconists.

Source: Census of Population and Housing

In some industries the concentration was more marked among second generation Australians than among the overseas born. For example, women's hairdressing and beauty salons employed higher proportions of both Greek and Italian second generation Australians than of the Greek or Italian born. The sugar cane industry also employed more Italian second generation Australians (12%) than Italian born (6%), and pharmacies employed more Greek second generation Australians than Greek born.

In contrast, some industries have greater numbers of Greek and Italian born than second generation Greeks and Italians. For example, 17% of those employed in the concreting industry were Italian born compared to 7% of Italian second generation Australians. Similarly 6% of those employed in fish shops, take-away food or milk bars were Greek born compared to 3% Greek second generation Australians.

Industries^(a) with highest concentrations of second generation Australians with Greek or Italian born fathers, 1991

Industry	Italian			All people
	Second generation	Overseas born	Total	
	%	%	%	'000
Sugar cane	12.0	5.5	17.6	9.0
Fruit, vegetable stores	11.6	13.3	25.0	15.3
Hairdressers, beauty salons, undefined ^(b)	8.8	4.5	13.3	17.5
Women's hairdressing, beauty salons	8.3	2.7	11.0	25.1
Concreting	7.3	17.0	24.3	14.7
All Industries	2.1	1.6	3.8	7 109.3

Industry	Greek			All people
	Second generation	Overseas born	Total	
	%	%	%	'000
Fish shop, take-away food, milk bars	3.0	6.1	9.2	99.4
Women hairdressing, beauty salons	2.5	0.7	3.1	25.1
Pharmacies	2.0	0.3	2.3	33.1
Womens, girlsweat stores	1.8	1.4	3.2	35.1
Savings banks	1.8	0.6	2.3	38.1
All Industries	0.9	0.9	1.8	7 109.3

(a) Industries employing over 500 second generation Australians from the selected birthplace group.

(b) Includes uni-sex hairdressers and beauty salons, and those where sex of clients was not specified.

Source: Census of Population and Housing

Educational attainment

In almost all birthplace groups, second generation Australians are better educated than the overseas born. However, educational attainment varies with age, the highest proportions of people with bachelor degrees or higher are among those aged 25–44. Because the age structures of the first and second generation differ, comparisons are best made using age standardised data.

In 1991, on a standardised basis, 21% of Australian born people with a Chinese born father had a bachelor or higher degree compared to 15% of the Chinese born. 10% of Australian born people with a Lebanese born father had a bachelor or higher degree compared to only 3% of the Lebanese born. The Indian born, however, were better educated than second generation Australians with Indian born fathers.

Generally, second generation Australians are not only better educated than the overseas born, but are also better educated than the rest of the population. This may reflect the emphasis the overseas born place on high levels of education for their children.

Endnotes

1 In the 1991 Census, 370,000 people did not state their birthplace, and a further 160,000 Australian born people did not provide enough information about their parents' birthplaces to determine whether they were second generation. These people have been excluded from this review. In addition, not stated responses have been excluded from percentage calculations in all tables except that pertaining to religion.

2 Encyclopedia Britannica (1994) *Book of the Year*.

Educational attainment, 1991

Birthplace group	Proportion of population with bachelor degree or higher(a)	
	Overseas born	Second generation(b)
	%	%
China	15.5	20.9
Poland	13.5	17.8
India	28.3	13.5
New Zealand	8.6	13.0
Greece	4.7	12.6
Lebanon	2.9	10.4
Germany	9.0	10.3
Yugoslavia	3.3	9.2
Netherlands	7.6	8.8
UK	9.4	8.6
Italy	3.8	7.3
Malta	2.5	3.5

(a) Standardised to the age distribution of the total Australian population. Qualifications include those received overseas.

(b) Father born in selected country.

Source: Census of Population and Housing

Net overseas migration

POPULATION GROWTH

Net overseas migration in 1993 was the lowest since 1976. Only five years earlier, in 1988, net migration had been at its post-war peak.

In 1993 Australia's population increased by 170,000 people. Most of this was due to natural increase, the difference between the number of births and the number of deaths. Net overseas migration was responsible for only 34,000 of the increase.

198,000 people moved to Australia in 1993 and 140,000 residents moved away. In addition there was a net effect of 51,000 Australian residents and 29,000 overseas visitors category jumping. The main components of category jumping were Australian residents who left Australia, intending to return within a year, but who stayed away longer, and overseas visitors who stated an intention of staying less than a year, but who had not departed within that year.

Trends in migration

Immigration to, and emigration from, Australia have grown in the post-war period, although there have been significant fluctuations. In the period there have been three major waves of immigration to Australia, the first peaking in 1950 when 175,000 people migrated to Australia. This was primarily due to the displacement in Europe caused by World War II, and to Australian government policies encouraging growth.

Migration patterns

Migration components	1988 '000	1993 '000
Permanent and long-term movement		
Arrivals	253.9	197.9
Departures	104.8	140.4
Category jumping(a)	23.7	-23.6
Visitors	52.3	28.8
Residents	28.6	50.7
Net overseas migration	172.8	33.9

(a) Components of category jumping do not add to total in 1993 because the net overseas migration is a preliminary estimate used for the population estimates.

Source: Overseas Arrivals and Departures; Estimated Resident Population

Net overseas migration

All movement to and from Australia is classified as permanent, long-term or short-term on the basis of usual residence, visa status, and stated intentions on length of stay. *Permanent movement* is movement by people who intend to settle in Australia or overseas. *Long-term movement* is movement by people who intend to stay in Australia or abroad for a period of 12 months or more. *Short-term movement* is movement by people who intend to stay in Australia or abroad for a period of less than 12 months.

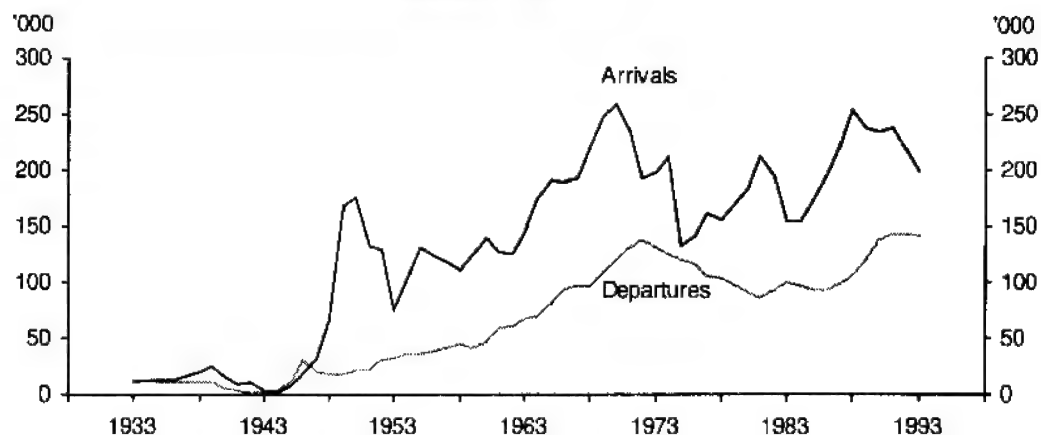
Net overseas migration consists of permanent and long-term arrivals (immigration) less permanent and long-term departures (emigration). However, because people's intentions do not always become reality there is an additional component of net overseas migration, known as category jumping. *Category jumping* is the net effect of people who stated that their journey was short-term but stayed 12 months or more (therefore becoming permanent or long-term) and people who stated that their movement was permanent or long-term but stayed less than 12 months (therefore becoming short-term). Category jumping has only been included in the net migration figure since 1976.

Category jumping by residents is the difference between the number who leave Australia short-term but who do not return within 12 months and the number who leave Australia intending to stay away for 12 months or more but who return earlier. It is subtracted from the population estimates.

Category jumping by visitors is the difference between the number who intend to stay in Australia short-term but who stay for 12 months or more and the number who intend to stay for 12 months or more but who leave earlier. It is added to the population estimates.

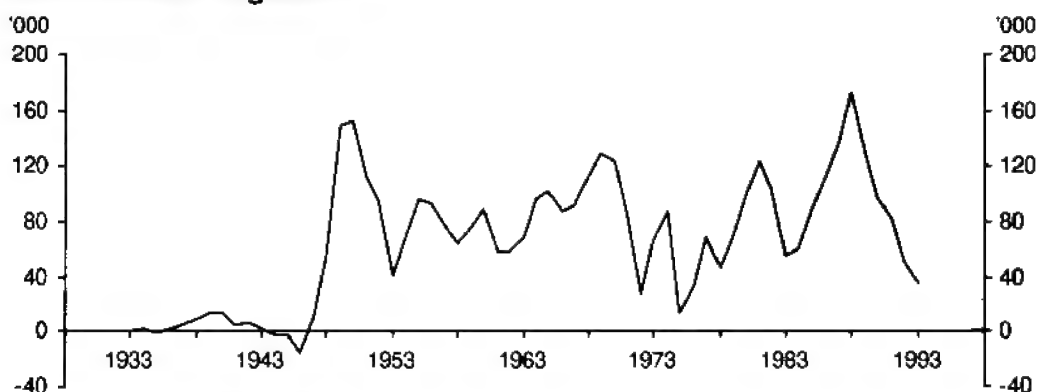
While visitor category jumping may include a component of illegal immigration, many visitors who outstay their original intentions do so legally, either because they are Australian or New Zealand citizens and do not require visas, or because their visa status entitles them to stay for more than a year, or they have been granted a visa extension.

Main components of net overseas migration



Source: Overseas Arrivals and Departures

Net overseas migration



Source: Overseas Arrivals and Departures

The second significant wave of immigration to Australia peaked in 1970, when 259,000 people migrated to Australia. The third wave of migration peaked in 1988, when 254,000 people migrated to Australia.

Emigration has been much less volatile than immigration. Emigration increased steadily after World War II until 1972. This peak, two years after the peak in immigration, was primarily because large numbers of settlers who arrived in the 1970 wave returned to their country of birth. Emigration peaked again in 1991 and 1992, three to four years after the peak in immigration. In the 1990s there have been record levels of emigration with more than 140,000 departures each year since 1991. This is, in part, due to the high level of immigration in the late 1980s (see *Australian Social Trends 1994* pp. 13–17 *Emigration*).

Category jumping has become a much larger component of net overseas migration since the late 1980s. The net gain due to category jumping of 24,000 in 1988 was nearly double the previous record net gain of 13,000 in 1977. Similarly, the net loss of 25,000 people through category jumping in 1992 was more than four times the pre-1991 record loss of 4,200 in 1978.

Net overseas migration has been quite volatile in the post-war period. The major fluctuations have generally followed the pattern of immigration with peaks in net migration occurring around the same time as peaks in immigration.

Population distribution

Although internal migration has a major effect on population distribution within Australia (see *Internal migration* pp. 16–20), overseas

Components of population growth rate^(a), 1993

State	Natural Increase	Permanent and long-term movement		Category jumping	Net overseas migration	Internal migration	Total growth
		Arrivals	Departures				
	rate	rate	rate	rate	rate	rate	rate
NSW	7.5	13.8	9.6	-1.7	2.5	-2.7	7.3
Vic.	7.3	10.2	7.3	-1.2	1.7	-7.1	1.9
Qld	8.6	9.4	6.9	-1.2	1.3	17.3	27.1
SA	5.8	6.7	4.8	-0.8	1.2	-2.8	4.2
WA	8.7	13.5	8.6	-1.6	3.2	0.4	12.3
Tas.	6.4	4.1	3.4	-0.5	0.2	-4.1	2.6
NT	16.9	7.8	6.3	1.6	3.1	-8.7	11.3
ACT	11.0	17.9	18.1	-1.9	-2.1	5.3	14.2
Australia	7.7	11.3	8.0	-1.3	1.9	..	9.7
	'000	'000	'000	'000	'000		'000
Australia	135.8	197.9	140.4	-23.6	33.9	..	169.7

(a) Rate per 1,000 mid-year population.

Source: Overseas Arrivals and Departures

migration also has an impact. In 1993 net overseas migration, relative to population, was highest in New South Wales, Western Australia and the Northern Territory. In that year, New South Wales had 34% of Australia's population and received 44% of the net overseas migration. Western Australia, with 9% of the population, received 16% of net overseas migration. Queensland, however, with 17% of the population, received only 12% of net overseas migration.

It should be noted that state of intended residence is measured by asking people, on arrival, their intended address in Australia. Many people have an address at which they will stay for a short period before moving. Within a year many people will have moved, some interstate. Address of intended residence, therefore, gives a bias towards those areas which have more overseas arrivals, especially Sydney.

In 1993 the Australian Capital Territory attracted 5,300 overseas migrants, representing 18 arrivals per 1,000 population, the highest rate of any state or territory. It also had the highest rates of loss through emigration and category jumping. This resulted in the Australian Capital Territory being the only state to have a net population loss due to overseas migration.

In 1993 Tasmania had the lowest rates of immigration, emigration and loss through

category jumping. Total net overseas migration to Tasmania was 109 people, or 0.2 per 1,000 population

Age and sex structure

Immigrants and emigrants both tend to fall within a fairly narrow age range. 54% of both immigrants and emigrants were aged 15–34 in 1993, compared to 32% in the entire Australian population.

In 1993 the median age of all Australians was 33. The median age of immigrants was 28 and the median age of emigrants was 29. While the numbers of both immigrants and emigrants aged 15–24 were significantly smaller than the numbers aged 25–34, the net migration was larger in the 15–24 years age group (17,000 compared to 14,000).

Overall there were slightly more male immigrants than female (101 males per 100 females), and significantly more male emigrants than female (108 males per 100 females). This resulted in 87 males per 100 females in net overseas migration.

In each age group, the ratio of males per 100 females (sex ratio) was similar for immigrants and emigrants. Up to age 15, there were more males arriving and departing than females, reflecting the proportions of boys and girls in the population. Women outnumbered men in the 15–24 years age groups in both arrivals

Age structure of permanent and long-term overseas migrants, 1993

Migration components	0-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years & over	Total
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Arrivals	12.7	21.2	48.5	58.2	30.0	14.3	7.8	5.4	197.9
Departures	9.1	12.5	31.1	44.2	23.3	11.2	5.3	3.9	140.4
Net migration(a)	3.6	8.7	17.4	14.0	6.6	3.1	2.5	1.5	57.5

(a) Excludes category jumping.

Source: Overseas Arrivals and Departures

(87 men per 100 women) and departures (88 men per 100 women).

Between ages 30 and 69 men outnumbered women in both arrivals and departures, with the largest difference among 45-49 year olds, where, for both immigrants and emigrants, there were 138 men per 100 women. After this age, men's shorter life expectancy results in the gradual fall in the ratio of men to women with increasing age. Among immigrants aged 70 and over, there were 80 men per 100 women, and among emigrants, there were 76 men per 100 women.

Country of birth

In 1993 net migration of New Zealand born people to Australia was 9,300, the highest number of any country. This largely reflects the high level of visitor category jumping and immigration by New Zealand born people. Net category jumping of 7,000 by the New Zealand born was nearly twice the next highest number (China with 3,600). However, the New Zealand born were only the third largest group of permanent and long-term

arrivals after the Australian born and the UK and Ireland born.

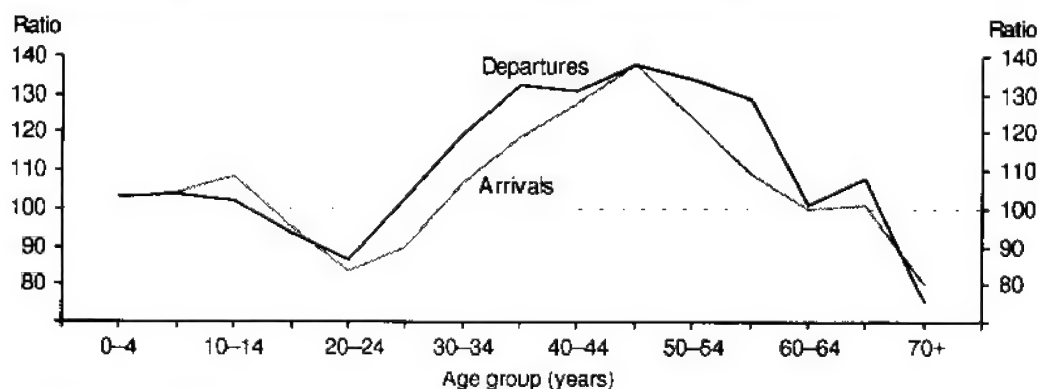
High levels of net migration from the former Yugoslav Republics and Viet Nam are primarily due to immigration. Net category jumping for each of these countries was just over 1,000. Category jumping by the Vietnamese born resulted in a net loss of population from Australia.

Net migration from the UK and Ireland was only 3,400 despite the UK and Ireland being the second largest source of permanent and long-term arrivals. Category jumping resulted in a net loss of 4,800 people and a further 15,400 people emigrated.

The five countries with the highest levels of net overseas migration were among the ten birthplace groups with the largest populations in Australia. Three of them (UK and Ireland, New Zealand and the Former Yugoslav Republics) were in the top five birthplace groups with populations over 170,000 people.

Overseas migration resulted in a net loss of 14,600 Australian born people from the

Sex ratio^(a) of permanent and long-term overseas migrants



(a) Males per 100 females.

Source: Overseas Arrivals and Departures

Net migration by country of birth, 1993

Country of birth	Arrivals	Departures	Category jumping		Net migration
			Visitors	Residents	
	'000	'000	'000	'000	'000
Highest net migration					
NZ	12.5	10.2	9.8	2.8	9.3
Former Yugoslav Republics	5.5	0.8	0.0	-0.7	5.5
Viet Nam	6.2	0.7	1.2	2.3	4.3
China	7.3	7.2	3.8	0.2	3.7
UK & Ireland	23.5	15.4	3.8	8.6	3.4
Lowest net migration					
Australia	40.3	49.5	6.3	11.7	-14.6
Japan	7.2	5.3	-0.1	3.5	-1.7
Cyprus	0.3	0.3	0.0	1.0	-1.0
Germany	2.1	1.3	-1.1	0.7	-0.9
Israel	0.4	0.3	0.8	-0.1	-0.8

Source: Overseas Arrivals and Departures

Related ABS publications

- ◆ Overseas Arrivals and Departures (3404.0)
- ◆ Australian Demographic Statistics (3101.0)

population. This included 40,300 people who returned to Australia after a year or more overseas, and 49,500 who left the country for a year or more.

After the Australian born, the highest net migration loss was of people born in Japan.

Part of this loss can be explained by the high level of net resident category jumping (Australian residents who left short-term but were away 12 months or more outnumbered those Australian residents who left long-term, but returned within 12 months).

Internal migration

DISTRIBUTION

In 1993 Queensland had a record net gain of 53,000 people from interstate, while Victoria had a record net loss of 32,000 people.

The most significant factor affecting the changes in population distribution in Australia is people's tendency to move. 43% of Australians moved house between 1986 and 1991. However, most of these moves were over relatively short distances. 30% of all people who changed address between 1986 and 1991 moved within their statistical local area (which generally corresponds to their local government area or suburb). Another 56% moved within their state/territory, usually within the same city. Only 14% of people who moved went interstate.

Interstate migration

10% of the population in 1991 had lived in a different state/territory, or overseas, in 1986. However this varied between states. Only 7% of the populations of Victoria and South Australia in 1991 had moved there from another state/territory, or from overseas, in the previous five years. Other states had much higher proportions moving; 27% of the population of the Northern Territory, 25% of the population of the Australian Capital Territory, and 14% of the population of Queensland had moved there in the previous five years.

Queensland, the Australian Capital Territory and Western Australia had more interstate arrivals than departures. Queensland had nearly twice as many arrivals (113,000) as departures (60,000). Three-quarters of the net interstate migration to Queensland (53,000)

Estimates of internal migration

The ABS uses three methods for estimating the number of people who move over a specified period.

Each Census of Population and Housing since 1971 has asked for current address and address five years before. Until 1986, address one year before was also asked but this was replaced with a question on state of residence one year before in the 1991 Census. These data are used to produce estimates of gross and net flows over a one or five year period. They are, however, the net effect of a series of moves. A person who moved interstate and then returned to their original address will be shown not to have moved at all over the period.

The ABS also derives annual estimates of net migration for statistical local areas (SLAs) by subtracting the natural increase (births minus deaths) from the estimate of annual population growth of each SLA. Quarterly estimates of interstate migration are derived from Medicare change of address registrations.

came from Victoria (21,000) and New South Wales (20,000). Queensland gained population from every state in 1993 while Victoria lost population to every state.

While 33% of all interstate movers moved to Queensland, only 12% of net migration from overseas went to Queensland. New South Wales and Victoria attracted the largest numbers of overseas migrants, together

Migration patterns, 1993

State	Interstate arrivals	Interstate departures	Net interstate migration	Net overseas migration	Total net migration
	'000	'000	'000	'000	'000
NSW	81.6	97.8	-16.1	15.0	-1.1
Vic.	49.1	80.6	-31.5	7.7	-23.8
Qld	113.0	60.0	53.0	4.0	57.0
SA	24.6	28.7	-4.1	1.8	-2.4
WA	27.5	26.9	0.6	5.4	6.0
Tas.	10.0	11.9	-1.9	0.1	-1.8
NT	15.5	16.9	-1.5	0.5	-0.9
ACT	18.6	17.0	1.6	-0.6	0.9
Total	339.7	339.7	..	33.9	33.9

Source: Estimated Resident Population; Labour Force Survey

Net interstate and overseas migration, 1993

State moved from	State moved to							
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT
	'000	'000	'000	'000	'000	'000	'000	'000
NSW	..	-6.1	19.9	0.2	1.1	-0.1	0.1	1.1
Vic.	6.1	..	21.1	0.3	1.8	0.2	0.9	1.1
Qld	-19.9	-21.1	..	-4.0	-3.0	-1.8	-1.9	-1.3
SA	-0.2	-0.3	4.0	..	0.4	0.1	-0.1	0.2
WA	-1.1	-1.8	3.0	-0.4	..	-0.3	-0.1	0.1
Tas.	0.1	-0.2	1.8	-0.1	0.3	..	-0.1	0.1
NT	-0.1	-0.9	1.9	0.1	0.1	0.1	..	0.2
ACT	-1.1	-1.1	1.3	-0.2	-0.1	-0.1	-0.2	..
Net interstate migration	-16.1	-31.5	53.0	-4.1	0.6	-1.9	-1.5	1.6
Net overseas migration	15.0	7.7	4.0	1.8	5.4	0.1	0.5	-0.6
Total net migration	-1.1	-23.8	57.0	-2.4	6.0	-1.8	-0.9	0.9

Source: Estimated Resident Population; Overseas Arrivals and Departures

accounting for 67% of net migration to Australia.

Queensland has had the largest population growth due to interstate migration of any state since 1971. Net interstate migration to Queensland averaged 14,000 a year in the early 1970s, rising to 49,000 in the early 1990s. Over the same period, Victoria had a net loss of population in each period, with annual average losses ranging from 8,000 in the early 1980s to 28,000 in the early 1990s.

New South Wales has had a net interstate loss in each period since 1971. This loss has been larger than the loss from Victoria except in the late 1970s and early 1990s.

Distribution of interstate movers

Because capital cities contain large numbers of people and are the main employment base in each state/territory, they also attract large numbers of interstate movers and overseas migrants. Areas outside the capital cities also attract large numbers of interstate movers, and smaller numbers of overseas migrants.

Most moves are of relatively short distances, people moving within their local area or within their city. Long distance moves are much less common. People who live near borders such as those living in Tweed Heads, the Gold Coast, Albury or Wodonga are more likely to move interstate than others.

Areas where regional centres are in a different state from their region also have high levels of

Annual average net interstate migration

State	1972-76	1977-81	1982-86	1987-91	1992-93
	'000	'000	'000	'000	'000
NSW	-16.0	-6.9	-12.1	-23.5	-16.7
Vic.	-9.7	-12.5	-7.9	-13.2	-27.8
Qld	14.3	20.9	16.6	34.3	49.0
SA	1.9	-3.6	-1.6	-0.3	-3.1
WA	4.7	2.2	3.6	2.7	0.9
Tas.	-0.9	-1.1	-0.2	0.2	-1.4
NT	-0.2	1.2	0.3	-1.6	-1.7
ACT	5.9	-0.3	1.3	1.5	1.5

Source: Estimated Resident Population

Distribution of interstate and overseas arrivals, 1986-91

Each dot represents
100 people moving into
a statistical sub-division



Source: Census of Population and Housing

interstate mobility. For example, Broken Hill is in New South Wales, but has a high level of movement to and from South Australia. Similarly, the Australian Capital Territory attracts and supplies many movers to and from the surrounding areas of southern New South Wales. Central Australia also has a relatively high number of interstate movers despite the small population in the area.

While Queensland attracts large numbers of interstate movers, they tend to congregate in the south east corner of the state, especially along the coast. 70% of the Queensland population lived in the south east corner of the state in 1991, yet 78% of people who moved to Queensland settled in that area between 1986 and 1991.

Areas with declining population

Overall, population growth in Australia in 1992-93 was 1%; 0.8% was due to natural increase, ie the excess of births over deaths, and 0.2% to net overseas migration. However, there was considerable regional variation in these figures. At the regional level net migration is composed mainly of internal migration and its effect varied from a gain of 9% in part of Caboolture shire in Queensland to a loss of 4% of the population in Whyalla, South Australia.

The areas with the largest population decline in 1992-93 differed considerably in their population characteristics. In Whyalla, 30% of employed people worked in manufacturing basic metal products in 1991. Reductions in employment at the BHP smelter in Whyalla have significantly reduced employment

Areas with the most rapid decline in population^(a) 1992-93

Statistical sub-division	Population 1992	Natural Increase	Net migration	Total growth rate	Largest industry, 1991	
	'000	%	%	%	Industry	Employment %
Whyalla (SA)	26.3	1.0	-4.2	-3.1	Manufacturing basic metal products	30.2
Weston Creek (ACT)	26.7	0.8	-2.5	-1.8	Public administration	23.3
Glenelg (Vic.)	43.1	0.4	-1.9	-1.5	Agriculture	22.9
Central Metropolitan (WA)	142.3	0.1	-1.5	-1.4	Health	13.1
Belconnen (ACT)	89.2	1.1	-2.1	-1.0	Public administration	22.2
Central Canberra (ACT)	60.6	0.5	-1.4	-0.9	Public administration	21.0
Northern Middle Melbourne (Vic.)	190.7	0.5	-1.4	-0.9	Retail trade	12.7
Macalister-Avon (Vic.)	29.2	0.9	-1.8	-0.9	Retail trade	13.9
Inner Western Sydney (NSW)	153.1	0.3	-1.1	-0.8	Retail trade	12.7
Far West (NSW)	28.1	0.5	-1.4	-0.8	Mining metallic minerals	16.4
Total Australia	17 489.1	0.8	0.2	1.0	Retail trade	14.1

(a) Statistical Sub-divisions with a population greater than 25,000.

Source: Estimated Resident Population; Census of Population and Housing

opportunities, and so people have moved away in search of better prospects.

Weston Creek and Belconnen have a relatively large number of people in their 20s. These people, who have grown up in the area, are forming new households and moving away to other areas. Recent large residential developments in the Australian Capital Territory have also attracted people away from the older areas.

The decline in Glenelg (in Victoria) reflects that experienced in many rural areas around Australia over the past few decades. A number of factors have contributed to this rural decline. Goods once produced in the local area are now produced in centralised locations and transported around. Increased personal mobility has also resulted in services being centralised in larger towns, reducing employment and therefore population in local centres. Technological changes in agriculture have reduced agricultural employment, and this has flowed through to other industries¹.

The inner areas of Australia's capital cities have a high proportion of older people, and consequently, a low rate of natural increase. Large parts of these areas have been redeveloped for non-residential use and the areas have therefore had a net loss of population¹.

Capital city migration

Overall, between 1986 and 1991, the capital cities had a net loss of 116,000 people to the rest of the country. This was made up of a net loss of 78,000 people from the capital city to other areas of the same state, plus 38,000 to non-capital city areas of other states.

Between 1986 and 1991, Sydney had a net loss of 139,000 people to other areas of Australia. About half of this movement (68,000) was to other areas of New South Wales, especially coastal areas. There was also a large net migration to other capital cities (35,000), especially Brisbane (22,000) and Perth (6,000), and to other areas of other states, especially south east coastal Queensland.

There was a large net migration of people from Melbourne to other areas in Victoria (20,000). The net migration from Melbourne to other states was most likely to go to areas other than the capital cities.

Brisbane had a net gain of 46,000 people, with about 73% of this coming from other capital cities. The rest of Queensland had a net gain of 79,000 people, with 66% of this coming from capital cities other than Brisbane.

Net internal migration patterns, 1986–91

State	Internal migration to capital city from				Internal migration to rest of state from			
	Rest of state	Other states		Total Australia	Capital city	Other states		Total Australia
		Capital	Other			Capital	Other	
	'000	'000	'000	'000	'000	'000	'000	'000
NSW	-67.6	-34.8	-36.2	-138.7	67.6	-10.5	-11.7	45.4
Vic.	-20.4	-6.9	-20.5	-47.8	20.4	-6.5	-11.3	2.5
Qld	-0.9	33.9	13.1	46.2	0.9	52.4	25.8	79.1
SA	3.8	-0.9	0.5	3.4	-3.8	-0.8	-3.1	-7.7
WA	4.6	9.8	3.1	17.5	-4.6	1.4	1.7	-1.5
Tas.	2.4	-0.1	-0.2	2.2	-2.4	1.3	-0.9	-2.0
NT	0.0	-1.5	-0.7	-2.2	0.0	0.2	-0.5	-0.3
ACT	..	0.4	3.3	3.7	..	..	..	..
Total	-78.0	0.0	-37.6	-115.6	78.0	37.6	0.0	115.6

Source: Census of Population and Housing

Related ABS publications

- ◆ Australian Demographic Statistics (3101.0)
- ◆ Estimated Resident Population by Age and Sex in Statistical Local Areas, Australia — Data on Floppy Disk (3208.0)
- ◆ Population Growth and Distribution in Australia (2822.0)

Endnotes

- 1 Hugo, G. (1989) *Atlas of the Australian People*
Bureau of Immigration Research.

Projections of the working age population

PROJECTIONS

The size and share of Australia's future working age population is of interest for two reasons. It is a major determinant of the size of the future labour force and it is also the group which has prime responsibility for supporting children and older people. Researchers have drawn attention to the lack of concern being expressed about the rapidly increasing number of people in the working age groups over the next 20 years. This contrasts with the concern expressed about the increase in the numbers of elderly people which will take place 20 to 40 years ahead.¹

Working age population

In this review *working age population* refers to persons aged 15–64.

Projections methodology

The ABS uses the cohort component method of population projection. This method takes a base year population for each sex by single years of age and advances it year by year by applying assumptions about future mortality, fertility and migration. This procedure is repeated for each year in the projection period for each state and territory and for Australia. The resulting population projections for each year for the states and territories, by sex and age in single years, are adjusted to sum to the Australian results.

The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The data presented here are from Series A because the assumptions (medium fertility, low overseas migration and high interstate migration) most closely reflect prevailing trends.

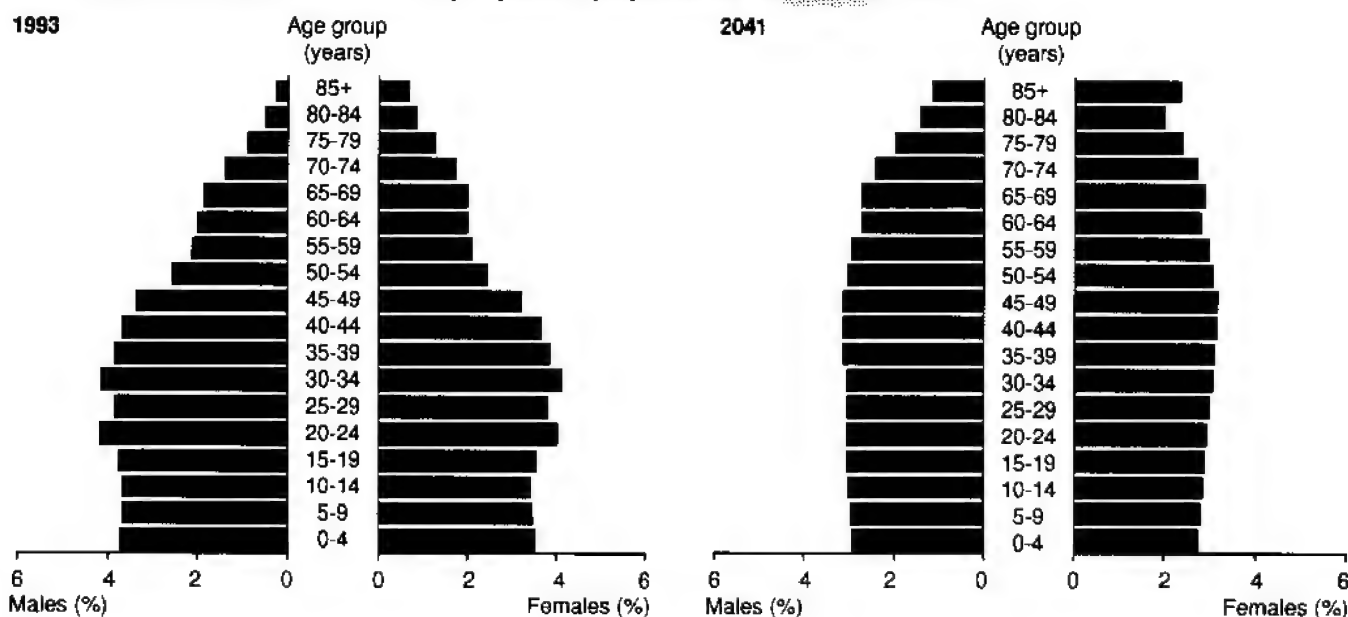
For detailed information on the assumptions underlying Series A, see *Projections of the Populations of Australia, States and Territories, 1993 to 2041* (3222.0).

From now until 2011 working age people will continue to represent around 67% of the population. After 2011 their representation is projected to decline.

Population growth

Australia's population is expected to grow by 41% between 1993 and 2041 and to age rapidly. In the year 2041, it is projected that the number of older people (aged 65 and over) in the population will exceed the number of children (aged 0–14) for the first time. By 2041, there are projected to be 5.5 million older people (22% of the population) and 4.3 million children (17% of the population). The proportion of the population which is of working age (15–64) is projected to remain stable at around 67%

Population structure, 1993 and projected population structure, 2041



Source: Population Projections, 1993-2041: Series A; Estimated Resident Population

Projected growth of the population

Age group (years)	1993	2011	2041	Increase 1993–2011	Increase 1993–2041
	'000	'000	'000	%	%
0–14	3 831.1	4 040.9	4 304.3	5.5	12.4
15–24	2 746.1	2 793.2	2 971.2	1.7	8.2
25–44	5 491.9	5 762.1	6 150.9	4.9	12.0
45–64	3 531.4	5 467.0	5 954.4	54.8	68.6
65 and over	2 066.0	2 889.3	5 477.6	40.2	165.8
Total	17 661.5	20 952.4	24 858.4	18.6	40.7

Source: Population Projections, 1993–2041: Series A; Estimated Resident Population

until 2011 and then to decline to 61% by 2041.

In the period to 2011, the total population is projected to grow by 19%. The largest percentage growth (55%) is projected among those aged 45–64. The lowest growth (2%) is projected among those aged 15–24. In the following 30 years, the 65 years and over age group will grow at the fastest rate and the 15–24 years group will continue to grow at the slowest rate.

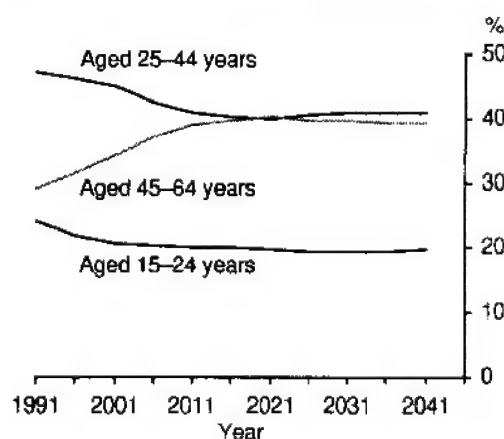
Working age population

The working age population can be divided into three groups: youth (15–24 years), prime working age (25–44 years) and older working age (45–64 years). The proportions of the working age population in the youth and prime working age groups are projected to decrease over the next 50 years. By 2041, these groups will represent 20% and 41% of the working age population respectively. The proportion of working age people in the

45–64 years age group is projected to increase from 30% in 1993 to 39% in 2041. The age structure of the working age population will therefore be considerably different in 50 years time and Australia will have an older labour force (see *Projections of the labour force* pp. 89–90).

People of working age often have family responsibilities, especially for children and ageing parents. Between 1993 and 2041 the proportion of older people is projected to increase from 12% to 22% while the proportion of children is projected to decrease from 22% to 17%. Children are financially, socially and physically dependent on their parents although the extent of dependency decreases with age. However, they are increasingly remaining in dependent situations beyond the age of 15 (see *Australian Social Trends 1994* pp. 43–46 *Living with parents*). Conversely, older people are not always financially dependent. However, the working population pays taxes which fund pensions and other government benefits for many of the aged. The aged may become more socially and financially dependent as they get older, especially if they become frail, disabled or suffer ill health.

Projections of working age people



Source: Population Projections, 1993–2041: Series A; Estimated Resident Population

Projected changes in the size of the working age population relative to the young (aged 0–14) and old (aged 65 and over) indicate the changing demands that may be placed on society in the future. The relative size of the older population is projected to increase steadily from 18 for every 100 of working age in 1993 to 21 in 2011, then more rapidly to 36 in 2041. During this period the relative size of the child population is projected to decline from 33 for every 100 of working age in 1991 to 29 in 2011, and remain around 29 until 2041.

The slow growth of the child population implies a relative decrease in government outlays on children's services. However, this

Projected growth of the working age population

State	1993	2041	Increase 1993-2041
	'000	'000	%
NSW	3 983.9	4 787.4	20.2
Vic.	2 986.5	3 164.1	5.9
Qld	2 072.8	3 594.7	73.4
SA	966.0	965.4	-0.1
WA	1 125.7	1 714.1	52.3
Tas.	306.5	315.5	2.9
NT	116.4	190.2	63.4
ACT	211.6	345.1	63.1
Australia	11 769.4	15 076.5	28.1

Source: Population Projections, 1993-2041: Series A;
Estimated Resident Population

will only partly offset the likely increase in outlays associated with ageing, particularly on health services and income support, which are much higher than the outlays associated with children².

State projections

Over the period 1993-2041, the projected increases in the numbers of people of working age are expected to vary between the states and territories, depending on the age structures of their populations and the projected levels of fertility, mortality and net migration. Queensland is expected to experience the greatest proportional increase in the working age population (73%), followed by the Northern Territory, Australian Capital Territory (both 63%) and Western Australia (52%). South Australia is projected to experience a slight decrease in the number of people of working age.

Alternate net overseas migration level

The level of net overseas migration gain assumed for projection series A rises from 40,000 in 1993-94 to 70,000 in 1999-2000 and then remains constant. An alternate scenario is provided by series D in which net overseas migration gain is assumed to rise to 100,000 in 2000-01 and then remain constant. The impact of this alternative is that the population increases by 51% by 2041 to reach 26.7 million, 1.8 million more than

International comparison

The proportion of people in the working age populations are projected to decrease in most of the selected countries. China, Indonesia, Malaysia, Papua New Guinea and Viet Nam are exceptions. In 1995, the proportions range from 57.5% in Papua New Guinea to 71.3% in the Republic of Korea. By 2025 the proportions are projected to range from 60.5% in Japan to 68.5% in Viet Nam.

Projections of the working age population

Country	1995	2025
	%	%
Australia	66.8	64.4
Canada	67.3	63.4
China	66.4	68.4
France	65.3	62.1
Greece	67.2	62.2
Hong Kong	70.8	62.9
Indonesia	62.2	68.3
Italy	69.0	63.3
Japan	69.2	60.5
Korea (Republic of)	71.3	68.0
Malaysia	58.2	68.3
New Zealand	65.7	64.7
Papau New Guinea	57.5	65.8
Singapore	70.9	63.8
Sweden	63.8	62.0
United Kingdom	64.7	63.6
United States	65.5	63.7
Viet Nam	58.1	68.5

Source: United Nations (1993) *World Population Prospects 1992*

under the series A assumption. However, the projected age distribution in 2041 does not change significantly.

Endnotes

- 1 Young, C. (1993) *Population projections for Australia, What can they tell us? People and Place* Vol.1 No.1.
- 2 Household Expenditure Survey, Australia: the Effects of Government Benefits and Taxes on Household Income (6537.0).

Related ABS publications

- ◆ Projections of the Populations of Australia, States and Territories, 1993 to 2041 (3222.0)

Family

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LIVING ARRANGEMENTS

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While children are growing up in a wider variety of family structures than ever before, the majority still live with both natural parents.

FAMILY FORMATION

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The crude marriage rate in Australia is at its lowest since the Great Depression. However up to 60% of married people can expect to stay married to the same person until one partner dies.

Trends in de facto partnering.....	38
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In 1992, 8% of all couples were in de facto relationships. 65% of the people in these couples had never been married.

FAMILY FUNCTIONING

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The patterns and types of support given to, and received from, family members vary throughout people's lives. People in their early 30s spent the most time interacting with family members.

Family — national summary

LIVING ARRANGEMENTS		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total families	'000		3 947	3 983	4 033	4 087	4 146	4 236	4 319	4 456	4 502	4 587	4 638
Persons who live alone (of persons aged 15 years and over)	%		7.6	7.9	8.2	8.2	8.3	8.5	8.4	8.2	8.6	8.9	10.2
Average family size (persons)	no.		n.a.	n.a.	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2
Couple families with dependants (of all families)	%		47.6	47.2	46.7	45.8	45.5	45.7	44.7	44.3	43.7	43.4	42.9
One parent families with dependants (of all families)	%		7.5	7.9	7.8	7.8	8.4	8.1	7.6	8.1	8.5	9.0	9.0
Couple only families (of all families)	%		29.4	28.9	29.6	30.2	30.4	30.7	31.5	31.2	31.3	31.1	32.1
De facto couples (of all couples)	%		n.a.	n.a.	n.a.	5.7	n.a.	n.a.	n.a.	n.a.	8.2	n.a.	n.a.
Couples with dependants, both employed (of all couples with dependants)	%		40.3	42.4	45.5	48.5	50.2	50.9	53.8	55.9	53.4	53.3	52.5
FAMILY FORMATION		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Marriage rate (per 1,000 not married males)	no.		52.4	50.7	48.8	46.0	45.7	45.3	44.2	43.0	40.9	41.1	39.8
Median age of men at first marriage	years		24.9	25.1	25.4	25.6	25.9	26.1	26.3	26.4	26.7	26.9	27.0
Median age of women at first marriage	years		22.7	22.9	23.2	23.5	23.8	24.0	24.2	24.3	24.5	24.7	24.8
Divorce rate (per 1,000 married males)	no.		12.2	12.0	10.9	10.7	10.6	10.8	10.8	10.9	11.6	11.5	12.1
Median duration of marriage to separation	years		7.7	7.8	7.7	7.6	7.3	7.3	7.3	7.3	7.4	7.4	7.6
Divorces involving children (of all divorces)	%		61.6	61.0	60.6	59.7	58.6	57.6	55.4	55.7	54.2	52.9	52.6
Total fertility rate (per woman)	no.		1.93	1.88	1.89	1.87	1.85	1.84	1.84	1.90	1.85	1.89	1.87
Median age of mothers at nuptial first confinement	years		25.7	26.0	26.3	26.5	26.8	27.1	27.3	27.6	27.8	28.0	28.3
Births to mothers under 20 years (of all births)	%		6.9	6.3	5.9	5.9	5.7	5.6	5.7	5.7	5.7	5.4	5.1
Births outside marriage (of all births)	%		14.7	14.8	15.5	16.8	18.0	19.0	20.2	21.9	23.0	24.0	24.9
Births outside marriage acknowledged by father (of all births outside marriage)	%		n.a.	n.a.	68.2	70.6	73.0	74.4	75.9	77.1	79.5	81.0	81.7

Reference periods:

Data on family formation are for the calendar year. Data on de facto couples are at census date. Data on other living arrangements are at 30 June from 1986; prior to that the reference date was 30 July.

Family — state summary

LIVING ARRANGEMENTS			Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total families	'000	1994			1 607	1 192	831	398	441	131	33	75	4 709
Persons who live alone (of persons aged 15 years and over)	%	1994			10.0	9.7	9.9	12.3	10.5	11.3	11.1	8.7	10.2
Average family size (persons)	no.	1994			3.2	3.2	3.1	3.0	3.1	3.1	3.1	3.2	3.1
Couple families with dependants (of all families)	%	1994			42.3	42.5	40.5	37.9	41.5	39.9	48.3	47.0	41.6
One parent families with dependants (of all families)	%	1994			8.7	8.5	9.3	9.0	9.6	10.2	12.6	12.3	9.0
Couple only families (of all families)	%	1994			31.7	32.6	34.7	37.9	34.3	36.6	27.6	28.0	33.3
De facto couples (of all couples)	%	1991			7.9	6.7	9.7	7.9	9.6	8.3	18.5	9.2	8.2
Couples with dependants, both employed (of all couples with dependants)	%	1994			51.7	52.7	52.9	55.0	52.9	49.1	63.7	64.1	52.8
FAMILY FORMATION			Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Crude marriage rate (marriages per 1,000 mean population)	no.	1993			6.7	6.1	6.6	6.2	6.2	6.5	4.8	6.0	6.4
Median age of men at first marriage	years	1993			27.2	27.0	26.6	26.8	27.1	26.5	28.7	27.1	27.0
Median age of women at first marriage	years	1993			24.9	25.2	24.4	24.6	24.8	24.3	25.7	25.1	24.8
Crude divorce rate (divorces per 1,000 mean population)	no.	1993			2.7	2.4	2.7	2.7	2.8	3.0	2.3	3.0	2.7
Median duration of marriage to separation	years	1993			7.1	7.7	7.9	8.2	8.1	8.3	6.9	8.2	7.6
Divorces involving children (of all divorces)	%	1993			50.6	53.7	55.6	49.4	53.6	61.7	58.5	56.8	52.6
Total fertility rate (per woman)	no.	1993			1.91	1.78	1.91	1.78	1.88	1.93	2.31	1.69	1.87
Median age of mothers at nuptial first confinement	years	1993			28.2	28.5	28.0	28.6	28.3	27.6	28.4	28.3	28.3
Births to mothers under 20 years (of all births)	%	1993			5.0	3.4	6.6	4.3	5.8	7.7	12.9	4.2	5.1
Births outside marriage (of all births)	%	1993			23.9	19.7	29.2	25.4	27.9	31.5	55.3	22.9	24.9
Births outside marriage acknowledged by father (of all births outside marriage)	%	1993			82.0	83.3	80.9	82.9	81.7	86.0	64.2	87.7	81.7

Reference periods:

Data on ~~de facto couples~~ are at census date. Data on other living arrangements are at 30 June.

Family — definitions and references

- Average family size** — the total number of family members divided by the number of families.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Birth** — the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any other evidence of life such as heart-beat.
Reference: Births, Australia (3301.0)
- Births outside marriage** — births where the father was not married to the mother at the time of the birth, whether or not the parents were living together at the time of the birth, and whether or not the child may subsequently have been legitimated or adopted.
Reference: Births, Australia (3301.0)
- Births outside marriage acknowledged by father** — births outside marriage where the father's name is recorded on the birth certificate.
Reference: Births, Australia (3301.0)
- Couple family** — a family consisting of a male and a female partner who are married or in a de facto relationship. It may include one or more dependent children and/or other family members.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Couple family with dependants** — a couple family with at least one dependent child present.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Couple only family** — a couple family with no dependent children or other family members (eg adult children) present.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Crude divorce rate** — the number of divorces granted in the calendar year per 1,000 of the mean population for the calendar year.
Reference: Divorces, Australia (3307.0)
- Crude marriage rate** — the number of marriages registered in the calendar year per 1,000 of the mean population for the calendar year.
Reference: Marriages, Australia (3306.0)
- De facto couple** — a couple who identified themselves as de facto partners in a relationship question.
Reference: Census of Population and Housing (2722.0)
- Dependants (dependent children)** — all family members under 15 years of age and family members aged 15-24 years attending an educational institution full-time, except those classified as husbands, wives, lone parents or other family heads.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Divorce rate** — the number of divorces granted per 1,000 married male or female population.
Reference: Divorces, Australia (3307.0)
- Divorces involving children** — divorces of couples with unmarried children of the marriage who were under 18 years of age at the time of application for divorce. Under the *Family Law Act 1975*, adopted and ex-nuptial children and children from a former marriage may be included (in certain cases). Children who are married or aged 18 years or more are not subject to custody and guardianship orders and are excluded.
Reference: Divorces, Australia (3307.0)
- Employed** — persons aged 15 years and over who either worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.
Reference: The Labour Force, Australia (6203.0)
- Family** — two or more people related by blood, marriage, adoption, or a de facto relationship who live in the same household. Three major family types are identified: couple families, one parent families and families of related adults. Non-family members such as friends or boarders are excluded from the data on families.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Lone parent** — the head of a one parent family.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Marriage rate** — the number of marriages per 1,000 not married male or female population aged 15 years and over.
Reference: Marriages, Australia (3306.0)
- Median** — the value at which half the population falls above, and half falls below.
- Median age at first marriage**
Reference: Marriages, Australia (3306.0)
- Median age of mothers at nuptial first confinement** — the median age of mothers at the birth of the first child of their current registered marriage. Confinements (the number of pregnancies resulting in at least one live birth) rather than births are used in this indicator to ensure that mothers who have multiple births are counted only once.
Reference: Births, Australia (3301.0)
- Median duration of marriage to separation** — the median interval between the date of marriage and the date of separation.
Reference: Divorces, Australia (3307.0)
- One parent family with dependants** — a parent together with at least one dependent child of his/her own.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Persons who live alone** — persons who are the only member of a household.
Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Total fertility rate** — the average number of children a woman would bear during her lifetime if she conformed to the current age-specific fertility rates.
Reference: Births, Australia (3301.0)

Children in families

LIVING ARRANGEMENTS

While children are growing up in a wider variety of family structures than ever before, the majority still live with both natural parents.

Families are particularly important in the lives of children and today's children are growing up in a wide variety of household and family structures. Many children now live in very different family situations from those of their parents or grandparents. Family circumstances can affect a child's social and economic well-being, and perspectives and future expectations of family life.

How many children?

Over the past two decades, the number of children in Australia has remained fairly constant at around 3.8 million. However, the proportion of children in the population has decreased from around 30% in the late 1950s to 22% in 1993¹. The decline in the relative size of the child population is due mainly to the fall in fertility, from 2.5 children per woman in 1973 to 1.9 in 1993². By 2041, the proportion of children in the population is projected to decline even further, to between 17% and 19%³.

Family types

Families vary considerably in size and structure, ranging from one parent with one child to large extended families. However, despite this wide variety of family types, most children (81% in 1992) live with both of their natural parents. Many children live in more than one family type during their childhood. For example, if a child's parents divorce and the custodial parent remarries, the child may experience three distinct family types: a couple family with both natural parents, a one parent family and a step family.

In 1992 there were 2.1 million families with children aged under 15. The majority (83%) were couple families. Family size varied according to family type. The average number of children in a couple family with children was 1.9 while the average number of children in a one parent family was 1.6.

Couple families

In 1992, 86% of all children lived in couple families; 81% with registered married couples and 5% with de facto couples. In 1982, 86% of children lived with registered married couples and 3% with de facto couples. Children living in de facto couple families were likely to be

Children and families

In this review, a *child* is any person under the age of 15. A *family* is defined as two or more people who live in the same household and are related to each other by blood, marriage (including de facto marriage), fostering or adoption.

ABS family data are available from a number of different sources. The Labour Force Survey provides a consistent annual time series for the 1980s and 1990s. Censuses of Population and Housing provide a more detailed classification of different family types. The 1992 Survey of Families in Australia provides a wide range of data, not available from other collections, about the characteristics of families and family members, and the nature of family support. Child Care Surveys provide data about the number of children receiving child care, the reasons for its use, and who the providers are.

younger than those living in registered married couple families. In 1992, 45% of children in de facto couple families were aged under 5 compared to 33% of children in registered married couple families.

Step families are couple families with only one natural parent of the children present. In 1992, 2% of all children lived in step families. The majority (91%) lived with their natural mother and a step father. Blended families are couple families with both natural and step children. Blended families occur when partners with children from a previous relationship form a new relationship and have

Children in families

Family type	1982	1992
	%	%
Couple families		
Registered married	86.4	80.6
De facto	2.7	5.2
One parent families		
Female parent	9.9	12.7
Male parent	1.0	1.5
Total	100.0	100.0
	'000	'000
Total children	3 721.8	3 804.9

Source: Survey of Families in Australia

children together. In 1992, 5% of children lived in blended families.

One parent families

In 1992, 14% of children lived in one parent families, an increase from 11% in 1982. Most of these children (89%) lived with their mothers. The proportion of children in one parent families living with their fathers increased from 9% in 1982 to 11% in 1992 (see Australian Social Trends 1994, *Lone fathers with dependent children*, pp. 40–42).

As children grow older, the chance of them living with both their natural parents decreases. In 1992, 87% of children aged 0–4 lived with both their natural parents compared to 76% of those aged 10–14.

Extended families

Children living in extended families live with their parent(s), and also with other relatives such as grandparents, uncles, aunts etc. In 1992, 3% of children lived in extended families, down from 4% in 1982. Children living in extended families were older than those living in nuclear families. In 1992, 37% of children living in extended families were aged 10–14 compared to 33% of those not living in extended families.

Adoption

In 1992–93, there were 783 adoptions in Australia. Most adoptees were children aged under 15 and two-thirds of these were under 5 years old. Most of these adoptions were by

International comparison

Countries with high proportions of children in their populations have greater potential for future population growth. In 1988, 23% of Australia's population was aged under 15. Australia was ranked 149th out of 173 countries in terms of the relative size of its child population. Kenya had the largest proportion of its population aged under 15.

Proportion of the population aged under 15 years, selected countries, 1988

Ranking	Country	Child population %
1	Kenya	51
84	Indonesia	40
86	Viet Nam	40
131	China	29
143	New Zealand	25
149	Australia	23
150	Hong Kong	23
154	United States	22
156	Canada	21
160	Japan	21
167	United Kingdom	19
170	Sweden	18
173	West Germany	15

Source: Kurian G.T. (1991) *The New Book of World Rankings*

Children in families, 1992

Parent(s)	0–4 years	5–9 years	10–14 years	Total
	%	%	%	%
Both natural(a) parents	86.5	81.6	75.9	81.3
Natural mother, step father	0.8	3.8	6.9	3.8
Natural father, step mother	**	0.3*	0.8	0.4
Natural mother only	11.9	12.6	13.4	12.6
Natural father only	0.5	1.4	2.5	1.5
Other	**	0.4	0.5	0.3
Total	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total children	1 269.2	1 282.5	1 253.2	3 804.9

(a) Includes adopted or foster children.

Source: Survey of Families in Australia

non-relatives and almost half (43%) of all children adopted by non-relatives had been born overseas. Among children aged 5–14 who were adopted in 1992–93, 71% were adopted by relatives. Most of these were adoptions by step-parents, a reflection of the changing structure of families in Australian society⁴.

Working arrangements

A major change affecting children is the increasing number of employed mothers. The proportion of couple families with children where both parents were employed increased from 35% in 1979 to 42% in 1994. In 1994, the father was employed full-time and the mother was employed part-time in 58% of these families. In a further 38%, both parents were employed full-time. Employed mothers were more likely to work part-time if they had young children, especially if they were under 5 years old.

The proportion of couple families with one parent employed and one not employed (which includes both unemployed and not in the labour force) declined from 48% in 1979 to 32% in 1994. However, the proportion where the mother was employed and the father was not employed increased from 0.8% in 1979 to 2.5% in 1994. This type of working arrangement is partly a result of increasing unemployment, as well as changing community attitudes towards the roles of

mothers and fathers, and increased employment opportunities for women.

In 58% of one parent families with children, the parent was not employed. 60% of lone mothers were not employed and 40% of lone fathers were not employed. Lone parents with older children were more likely to be employed than those with younger children. Over half of all lone parents whose youngest child was aged 10–14 years were employed, most on a full-time basis.

In 1979, 11% of all families with children had no employed parent(s). By 1994, this had risen to 18%. Part of this increase can be attributed to increased unemployment and increased access to government pensions and benefits for lone parents (see *Australian Social Trends 1994* pp. 147–153 *Social security transfer payments*).

Child care

Over the past decade there has been an increase in the proportion of children in formal and/or informal child care. This is related to the increase in the proportion of families with children in which both parents are employed. In 1984, 38% of children aged under 12 years received formal and/or informal care. By 1993, this had increased to 49%. Most child care is informal, ie provided by other family members, friends or neighbours, or paid baby sitters (see

Labour force status^(a) of parents with children aged under 15 years

Family type	1979	1984	1989	1994
	%	%	%	%
Couple families				
Both parents employed	35.0	35.7	45.2	42.3
Father employed, mother not employed	47.7	42.8	33.2	29.6
Mother employed, father not employed	0.8	1.2	1.6	2.5
Both parents not employed	4.2	6.5	5.9	8.3
One parent families				
Parent employed	5.4	4.9	6.4	7.2
Parent not employed	6.9	8.9	7.5	10.0
Total	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total families	1 904.2	1 967.0	1 946.8	2 040.8

(a) Not employed includes both unemployed and not in the labour force.

Source: Labour Force Survey

Australian Social Trends 1994 pp. 47–49 *Child care*).

The 1992 Time Use Survey⁵ found that parents who minded their own children as a main activity spent, on average, less than 2 hours per day on it. However, often child care takes place with other activities. For example, a person may be minding their child while cooking a meal and report cooking as the main activity. Child care is then considered a secondary activity. Parents spent an average of almost 8 hours a day on child care (5 hours 9 minutes for men and 9 hours 41 minutes for women) when child minding as a main or secondary activity was considered.

Income

A child's well-being, in terms of standard of living and quality of life, depends to a considerable extent on their family's economic resources. Children are dependent on their parents for food, clothing and shelter.

Equivalent income can be used to compare the financial resources of different family types. Equivalent income adjusts for the number of adults, their labour force status,

and the number of dependent children in a family.

In 1990, 44% of children lived in families whose equivalent income was \$350 a week or less. 68% of children in one parent families were in this category compared to 40% of children in couple families. A further 16% of children in couple families had an equivalent family income of more than \$620 a week compared to 4% of children in one parent families.

Child abuse

In 1992–93, there were 23,199 substantiated cases of abuse of children aged under 15 years. Girls were more likely to have been abused than boys. This is because girls were more likely to have been sexually abused than boys. There were over 5,000 substantiated cases of sexual abuse, and three-quarters of these involved girls. For all other types of abuse, ie physical, emotional and neglect, there was little difference between the numbers of cases involving girls and the numbers involving boys⁶.

Children who were sexually abused were most likely to have been abused by a friend or neighbour. However, for all types of abuse, most children were abused by a natural or adoptive parent⁶. Many cases of child abuse are either not reported or not substantiated, and therefore it is not possible to determine the full extent of child abuse in Australia⁷.

Related ABS publications

- ◆ Australia's Families: Selected Findings from the Survey of Families in Australia (4418.0)
- ◆ Focus on Families: Demographics and Family Formation (4420.0)
- ◆ Labour Force Status and Other Characteristics of Families (6224.0)
- ◆ Survey of Income & Housing Costs and Amenities: Income Units, Australia (6523.0)

Children in families, equivalent weekly income^(a), 1990

Income range	Children in couple families	Children in one parent families	Total children
	%	%	%
Under \$251	18.9	32.0	20.7
\$251–\$350	21.5	36.1	23.5
\$351–\$480	25.7	21.1	25.1
\$481–\$620	17.6	7.1	16.1
Over \$620	16.4	3.8	14.7
Total	100.0	100.0	100.0
	'000	'000	'000
Total children	3 412.1	534.0	3 946.2

(a) Calculated using full Henderson equivalence scale accounting for housing costs.

Source: Survey of Income & Housing Costs and Amenities

Endnotes

- 1 Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0).
- 2 Births, Australia (3301.0).
- 3 Projections of the Populations of Australia, States and Territories, 1993–2041 (3222.0).
- 4 Australian Institute of Health and Welfare (1994) *Adoptions Australia, 1992–93*.
- 5 How Australians Use Their Time (4153.0).
- 6 Australian Institute of Health and Welfare (1995) *Child Abuse and Neglect, 1992–93*.
- 7 Australian Institute of Health and Welfare (1994) *Child Abuse and Neglect, 1991–92*.

Trends in marriage and divorce

FAMILY FORMATION

Over the last 20 years marriage rates have fallen and age at first marriage has increased. In contrast divorce rates rose in the 1970s and stabilised in the 1980s. These trends represent important social change, particularly for family life, and have affected the size and composition of families and households in Australia (see Australian Social Trends 1994 pp. 35-39 *Changes in living arrangements*).

The crude marriage rate in Australia is at its lowest since the Great Depression.

However, up to 60% of married people can expect to stay married to the same person until one partner dies'.

Marriage trends

The crude marriage rate in Australia has fluctuated since it was first recorded in the 1860s. Broadly, the crude marriage rate has followed the pattern of prevailing economic and social conditions. It has fallen in times of depression or recession, eg in the 1890s and 1930s, and increased in times of prosperity such as the gold rush in the 1860s and the immediate post-war years of the early 1920s and late 1940s. Marriage rates have also generally increased during times of war. The lowest recorded crude marriage rate was 6 marriages per 1,000 of the population in 1931 and the highest was 12 per 1,000 of the population in 1942.

Since 1970 the crude marriage rate has declined. This is partly the result of economic downturn. In addition, rapid social change, such as changes in divorce laws and changes in attitudes to marriage and living

Marriage and marriage rates

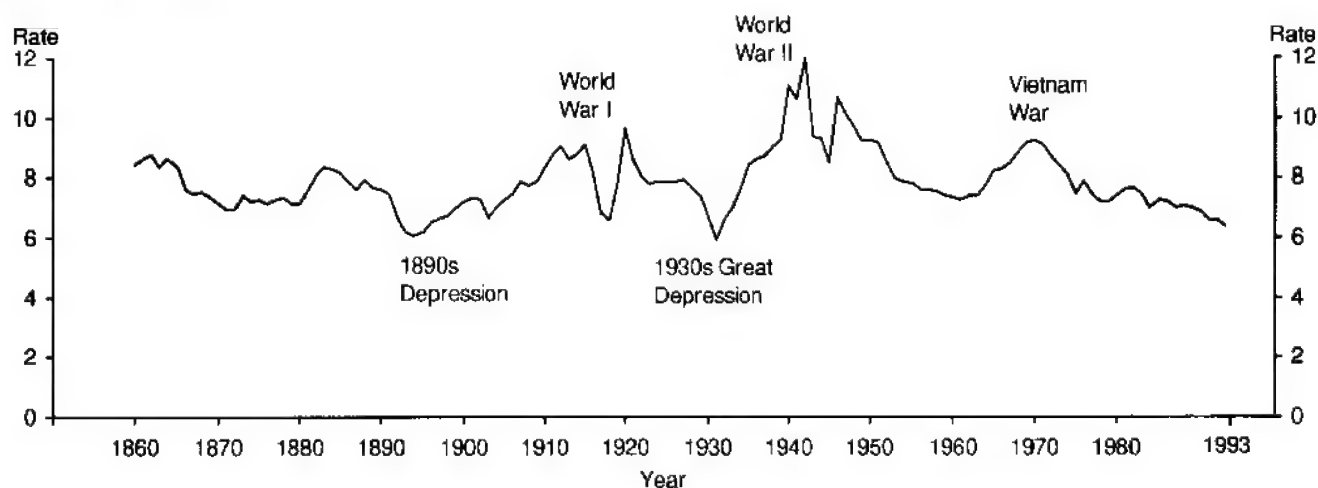
Under the *Australian Marriage Act 1961*, registered marriages may be celebrated by a minister of religion registered as an authorised celebrant, by a district registrar, or by other persons authorised by the Attorney General. In 1973 the minimum age a person may marry without parental consent was set at 18 years. In 1991 the Act was amended so that nobody could marry under the age of 16 years and between the ages of 16 and 18 years, a person could only marry with the consent of their parent or guardian and an order from a judge or magistrate. Any two persons under the age of 18 years may not marry each other.

The ABS collects *de facto marriage* from couples who identify themselves as *de facto* partners in a relationship question.

The *crude marriage rate* is the number of marriages in a year per 1,000 of the mean estimated resident population in the same year. The *age-specific marriage rate* is the number of men or women who married in each age group, per 1,000 of all men or women in the same age group. *Marital status specific marriage rates* are the number of men or women in each marital status group who married, per 1,000 of all men or women in that marital status group. Both age and marital status specific rates are only available separately for each sex.

The *crude divorce rate* is the number of divorces in a year per 1,000 of the mean estimated resident population in the same year.

Crude marriage rate



Source: Marriage Registrations

International comparison

The decline in the crude marriage rate in Australia is similar to other countries. In Canada, marriage rates have been dropping since 1973. In some countries, such as those in Scandinavia, the drop was evident from the 1960s. In 1993, Sweden had one of the lowest crude marriage rates in the world while the USA had one of the highest. However, it has also experienced decline since the 1970s.

Crude marriage rates, selected countries

	1975	1981	1987	1993
	rate	rate	rate	rate
Australia	7.5	7.6	7.0	6.4
Canada	8.7	7.8	7.1	5.8(a)
France	7.3	5.8	4.8	4.7(a)
Greece	8.5	7.3	6.3	5.9
Ireland	6.7	6.0	5.1	4.5
Italy	6.7	5.6	5.3	4.8
Japan	8.4	6.6	5.7	6.4
New Zealand	8.0	7.6	7.5	6.4
Sweden	5.4	4.6	4.9	3.8
United Kingdom	7.7	7.5	7.0	6.1(a)
USA	10.0	10.6	9.9	9.0

(a) Marriage rates for 1992.

Source: United Nations *Monthly Bulletin of Statistics*

arrangements, have had considerable effects on the marriage choices of all Australians.

De facto relationships have gained greater social acceptance in the last 15 years. They may lead to people entering registered marriage later in life, as people may participate in one or more de facto relationships before marrying. However, some people will never officially marry, preferring instead to live in a de facto relationship.

The ageing of the population also has an effect on crude marriage rates because of increased proportions of the population in older age groups who are already married or who are less inclined to remarry. The ageing of the population has been responsible for some of the decrease in the crude marriage rate.

Age at marriage

In 1993, for all marriages, the median age of brides was 26 years while the median age of

grooms was 29 years. For first marriages only, the median age at marriage was 25 years for women and 27 years for men. Both brides and grooms are older now than they were in the 1960s and 1970s.

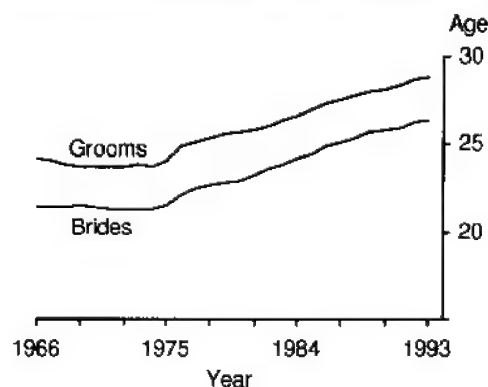
Factors contributing to older ages at first marriage include a later age leaving school or education, and the increased incidence of defacto relationships. The recessions in 1982-83 and 1989-90 may also have contributed since unstable employment prospects and lack of financial security may have caused couples to defer marriage.

Because of the increase in divorces, there are now a larger number of divorcees than before 1976, when the Family Law Act came into effect. This has led to a larger proportion of marriages being remarriages for one or both partners. Since people who remarry are older than those who marry for the first time, this is also a contributing factor to higher median age for all marriages.

Traditionally, grooms have been older than their brides. However the difference between the median ages at marriage is slowly narrowing. In 1993 the difference between the median ages of brides and grooms was 2.4 years compared to 2.7 years in 1966 and 3.1 years in the period 1921-25.

For first marriages, the age difference between women and men has decreased from 2.6 years in 1966 to 2.2 years in 1993. Although both men and women are marrying at older ages than before, women in particular are delaying marriage compared to their counterparts in earlier generations.

Median age of brides and grooms



Source: Marriage Registrations

Age-specific first marriage rates

Age group (years)	Men				Women			
	1966	1976	1986	1993	1966	1976	1986	1993
	rate	rate	rate	rate	rate	rate	rate	rate
19 and under	14.9	9.9	2.4	1.4	61.5	49.0	15.2	7.4
20-24	152.8	122.6	63.4	40.5	272.0	187.5	112.0	73.7
25-29	195.7	135.9	105.0	90.4	183.9	138.8	120.2	105.9
30-34	100.3	81.8	77.6	72.3	90.8	86.5	74.0	69.8
35-39	48.6	45.9	42.7	42.0	45.0	49.8	39.8	35.6
40-44	27.9	25.5	22.2	21.9	24.9	26.3	22.9	17.8
45-49	15.7	15.7	13.4	12.1	15.9	15.5	12.8	9.8
50 and over	5.8	6.4	4.6	4.0	3.6	3.9	2.1	2.3

Source: Marriage Registrations

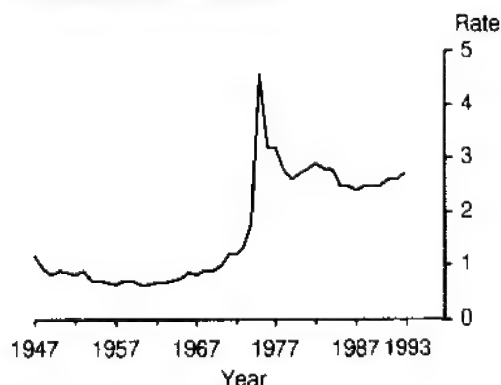
First marriages

Like the crude marriage rate, the first marriage rate fell between 1966 and 1993. A fall occurred in all age groups for both men and women. In particular the teenage marriage rate declined significantly.

In 1966 the first marriage rate for men aged 19 or less was 14.9. In 1993 this had fallen to 1.4. For women the change was even more dramatic. The rate fell between 1966 and 1993 from 61.5 to 7.4. Changing social attitudes to lone parenting and the availability of contraception and abortion have contributed to fewer teenage marriages.

Other factors which generally affect first marriage rates include the increasing acceptance of de facto partnering, increased higher education opportunities for men and women, increased work and career opportunities for women, and decreases in housing affordability.

Crude divorce rate



Source: Divorce Registrations

Divorce trends

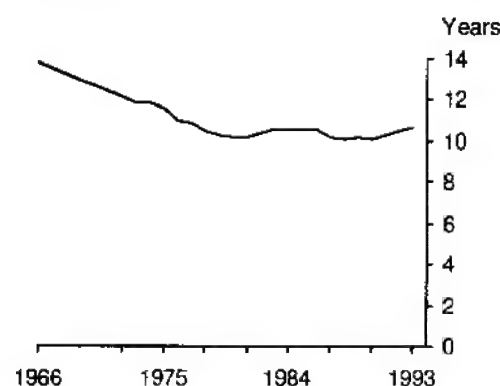
Not all family dissolutions are registered as divorces. Some married couples separate but never divorce. As de facto relationships are unregistered, their breakdown is also unregistered. Consequently the extent of family dissolution is not easily measured but can be expected to be higher than divorce rates show. In 1991 the Australian Institute of Family Studies found that over a thirty year period, 40% of all marriages end in divorce¹.

The trend in divorce in Australia changed with the introduction of the *Family Law Act 1975* which came into operation on 5 January 1976. It allowed only one ground for divorce, an irretrievable breakdown in the marriage, measured as the separation of the spouses for at least one year. This legal change resulted in a large increase in the crude divorce rate in 1976. The rate then declined until 1979 as the backlog of applications was cleared. Subsequently the rate has fluctuated with a slight increase evident since 1987. The divorce rate was consistently higher in the 1980s and early 1990s than at any time before 1975.

Duration of marriages ending in divorce

In 1993 the median duration of marriages which ended in divorce was 10.7 years. This was higher than at any time since 1977. Despite divorce being possible after one year's separation, the median duration of marriage to separation in the late 1980s and early 1990s has been about 7 years (see *Family — national summary table* p. 26), indicating a delay of about 3 years between separation and the completion of divorce proceedings.

Median duration of marriage to divorce



Source: Divorce Registrations

Of marriages which ended in divorce, first marriages tend to have lasted longer than subsequent marriages. For women and men who divorced from their first marriage in 1993, the median duration of their marriage was around 12 years. In comparison divorces of those who had been married more than once occurred a median of around 8 years after their marriage.

Children in divorce

The proportion of divorces involving children decreased steadily between 1983 and 1993, from 62% to 53% (see *Family — national summary table* p. 26). In 1993, 10 of every 1,000 children in Australia were involved in a divorce, a slight reduction from the 1983 figure of 12. These changes, coupled with the increase in the median age of mother at birth of first child in marriage (see *Family — national summary table* p. 26), suggests that divorce is becoming more likely to occur before children are born.

Children^(a) and divorce

	1983	1988	1993
	'000	'000	'000
Divorces	43.5	41.0	48.3
Divorces involving children	26.8	23.6	25.4
Children involved in divorce	52.1	44.4	48.1
	rate	rate	rate
Children involved in divorce ^(b)	11.5	9.7	10.5

(a) Unmarried children of the marriage who were aged under 18 years at the time of the application for divorce.

(b) Rate per 1,000 children aged under 18 years.

Source: Divorce Registrations

Remarriage

Immediately following the introduction of the *Family Law Act 1975*, remarriage rates increased in every age group but remarriage rates in the 1980s and 1990s declined from the highs of the late 1970s. In the 1980s remarriages accounted for around one-third of all marriages.

Men are more likely to remarry than women although the gap has narrowed. In 1966 widowed or divorced men were three times as likely as widowed or divorced women to remarry. In 1993 they were twice as likely. In 1993, 68 of every 1,000 divorced men, and 52 of every 1,000 divorced women, remarried. Similarly, 16 of every 1,000 widowed men remarried compared to 4 of every 1,000 widowed women. This reflects the ageing of the population, the longer life expectancy of women than men and the tendency for men to marry someone younger than themselves. In 1994, 84% of widowed people were aged 60 or more and one-third of these were aged 80 or more. Women 80 years or more

Marital status specific remarriage rates^(a)

Year	Men			Women		
	Widowed	Divorced	Total	Widowed	Divorced	Total
	rate	rate	rate	rate	rate	rate
1966	26.1	130.5	53.1	7.1	109.9	17.3
1976	28.1	185.3	97.0	7.6	141.0	32.0
1986	20.5	96.6	69.6	5.4	72.3	27.5
1993	16.1	68.3	51.6	4.5	52.0	23.0

(a) Rate of remarriage per 1,000 of the marital status specific population.

Source: Marriage Registrations; Census of Population and Housing; Estimated Resident Population

outnumbered men 80 years or more by about 2 to 1.

Women tend to wait longer than men to remarry. In 1993 the median interval to remarriage for widowed women was 5.7 years compared to 4.0 years for men. Among divorced people the median intervals were 3.2 years for women and 2.8 years for men. These intervals have changed little in recent years.

The decline in the remarriage rate also reflects the increased likelihood of de facto relationships either as an alternative to remarriage or before remarriage. In 1992, 52% of people who were currently married after a previous divorce, had lived in a de facto relationship before the current marriage. This compares to 32% of people who married for the first time².

Previously divorced people, on average, also spent a longer period in de facto relationships than those who were in their first marriage. Of people who were in de facto relationships prior to their current marriage, 21% of those previously divorced spent less than 1 year living together compared to 30% of first time marrieds. De facto relationships of more than 5 years duration accounted for 8% of first marrieds who lived in such a relationship, compared to 16% of previously divorced persons.

Related ABS publications

- ◆ Marriages, Australia (3306.0)
- ◆ Divorces, Australia (3307.0)

Endnotes

- 1 Australian Institute of Family Studies (1993), 'Divorce Trends' in *Family Matters* Issue no. 35.
- 2 Focus on Families: Demographics and Family Formation (4420.0).

Trends in de facto partnering

FAMILY FORMATION

In 1992, 8% of all couples were in de facto relationships. 65% of the people in these couples had never been married.

De facto couples have always existed but remained largely unrecognised in family policy until recently. A gradual change in social attitudes since World War II has seen an increase in de facto partnering. Registered marriage is no longer seen as a prerequisite for living together or for having children. Individuals may choose to live together before, or instead of, registering a marriage and to have children outside a registered marriage. Legal and government systems are increasingly recognising, and taking into account, such living arrangements.

The ABS first collected data specifically on de facto relationships in the 1982 Family Survey. At that time 5% of all couples were found to be de facto. This rose to 8% of all couples in 1992.

De facto relationships prior to marriage

The incidence of de facto relationships prior to marriage has increased markedly in recent years. 56% of couples who married in 1992 had lived together before marriage compared to 16% of couples who married in 1975.

Of couples who married between 1975 and 1992 just over one-third had lived together prior to their registered marriage. Of these, 28% had lived together for less than a year before marrying and 60% had married in less than two years. 10% of those who had lived

Registered marriages^(a) preceded by co-habitation



(a) Most recent registered marriage only.

Source: Survey of Families in Australia

Couples and dependants

De facto couples are those who live together but are not registered as married and who identify themselves as de facto in a relationship question.

Registered married couples are those who live together and are registered as married to each other.

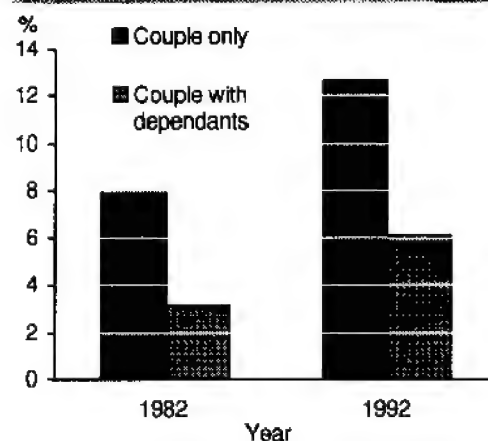
Dependants are all family members under the age of 15, and, for the 1982 Family Survey, children aged 15-19 attending education full-time, or, for the 1992 Survey of Families in Australia, children aged 15-24 attending education full-time. However, dependants who are themselves spouses or lone parents are excluded.

together before marriage, had lived together for five years or more.

Long term de facto relationships

In 1992, 30% of de facto couples had lived together for five years or more and 11% had lived together for ten years or more. However, de facto couples represented only 3% of all couples (both married and de facto) who had lived together for five years or more.

For some de facto couples, the decision to enter a registered marriage may be associated with planning for children. However, some have children as part of their continuing de



Source: Survey of Families in Australia

People in de facto relationships, 1992

Age group (years)	Never married	Separated	Divorced	Widowed	All persons in de facto relationships	% De facto, all persons in couples	% De facto, all persons
	%	%	%	%	% '000	%	%
15-19	100.0	**	**	**	100.0 30.1	72.2	2.3
20-24	96.8	1.5*	1.8*	**	100.0 163.5	39.9	11.4
25-29	85.3	6.2	8.6	**	100.0 167.2	19.2	12.1
30-34	63.4	6.4*	30.2	**	100.0 119.0	10.7	8.2
35-44	30.2	13.1	54.5	2.2*	100.0 135.2	6.3	5.1
45-54	14.3	19.5	62.1	4.1*	100.0 73.9	4.6	3.8
55-64	11.9*	20.7*	53.0*	14.4*	100.0 16.2	1.4	1.1
65 & over	**	**	38.8*	**	100.0 5.8*	0.5*	0.3*
Total	64.8	8.0	25.8	1.3	100.0 710.8	8.5	5.3

Source: Survey of Families in Australia

facto relationship and others bring children with them into the relationship.

The number of de facto couples with children is increasing at a faster rate than the number of de facto couple only relationships. In 1982, 8% of couple only families and 3% of couples with children were de facto. In 1992, de facto relationships made up 13% of all couple only families and 6% of couples with children. This was an increase of 88% for de facto couples with children compared to 58% for de facto couple only families.

Characteristics of people in de facto couples

In 1992, 5% of all people aged 15 and over were in de facto relationships. De facto relationships were most common among 25-29 year olds (12%) and 20-24 year olds (11%). These are the age groups when people begin partnering either as de facto or in a registered marriage. In 1992 the median age at marriage for all marriages (including remarriages) was 26 years for women and 29 years for men.

In 1992, 65% of people in de facto relationships had never been married, a reflection of the young age profile of de facto couples. A further 34% were divorced or separated. The remaining 1% of people living in a de facto relationships were widowed. This was probably because widowed people are more likely to be older and therefore less likely to be living in de facto relationships.

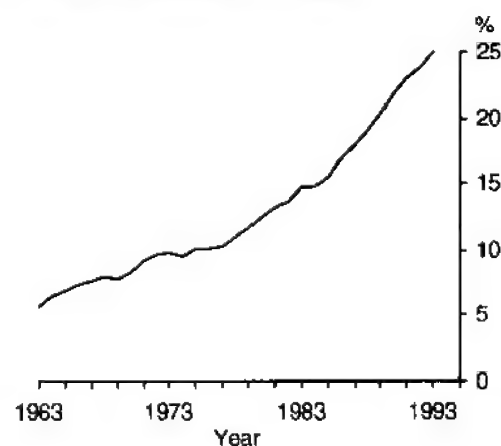
People under 35 years of age in de facto relationships were most likely to have never been married while those aged 35 and over were most likely to be divorced.

Births outside marriage

The increase in the proportion of births outside registered marriage, especially among older women, and the increase in the proportion which have paternity acknowledged, can be considered indicative of the increasing prevalence of permanent or long-term de facto relationships¹.

In 1963 births outside marriage made up 6% of all births and in 1976 this had increased to 10%. In 1993 they accounted for 25% of all births. The age of women bearing children

Births outside marriage



Source: Birth Registrations

Births outside marriage with paternity acknowledged

Age group of mother (years)	1976	1993
	%	%
19 and under	33.6	74.5
20-24	48.2	81.5
25-29	61.6	84.3
30-34	63.3	85.6
35-39	63.2	84.6
40 and over	54.4	76.6
Total	46.9	81.7
	'000	'000
Total	10.8	53.0

Source: Birth Registrations

outside marriage has also increased. In 1976, 38% of births outside marriage were to women aged less than 20 while 31% were to women aged 25 or more. In 1993, 18% of births outside marriage were to women aged

less than 20 and 47% were to women aged 25 or more. 23% were to women aged 30 or more.

Acknowledgment by fathers of children born outside registered marriage has also increased. In 1976, 47% of certificates for births outside registered marriage recorded the father's details compared to 82% in 1993.

Fathers' details have always been more likely to be recorded for births to older women than to younger women. In 1976, over 60% of births outside marriage to women aged 25-39 had the father's details recorded. Equivalent figures for women aged 20-24 and women aged less than 20 were 48% and 34% respectively. By 1993 the proportion of births outside marriage acknowledged by the father had increased for mothers of all ages but especially for those aged less than 25.

Endnotes

- 1 Sorrentino, C. (1990) *The changing family in international perspective* Monthly Labour Review, March 1990.

Related ABS publications

- ◆ Focus on Families: Demographics and Family Formation (4420.0)
- ◆ Births, Australia (3301.0)

Family support

FAMILY FUNCTIONING

In 1992, women spent nearly twice as much time as men interacting with their family. Women aged 30–34 spent the most time interacting with their family.

People's well-being is greatly influenced by the emotional, physical and financial support that they get from others. For many people, the most significant source of support is their family. But other sources, such as government and private welfare agencies and friendship networks, can be important.

In 1992 women spent an average of 3 hours and 13 minutes interacting with relatives each day, compared to 1 hour and 43 minutes spent by men. Men and women in the 30–34 years age group spent more time interacting with relatives than any other adult age group. This is the age range at which people are most likely to be married and have young children.

Correspondingly, young adults (15–24 year olds) and the elderly (people aged 65 and over) spent the least amount of time interacting with relatives. Men under 25 or over 69, and women over 74 spent less than one hour per day. These are the ages when people are most likely to live alone or with non-family members.

Parents providing child care

Parents give significant amounts of support to their children, especially when the children are young. The nature of this support is very broad and includes activities such as washing, cooking, cleaning and providing an income. These forms of support are not included in child care activities.

Support

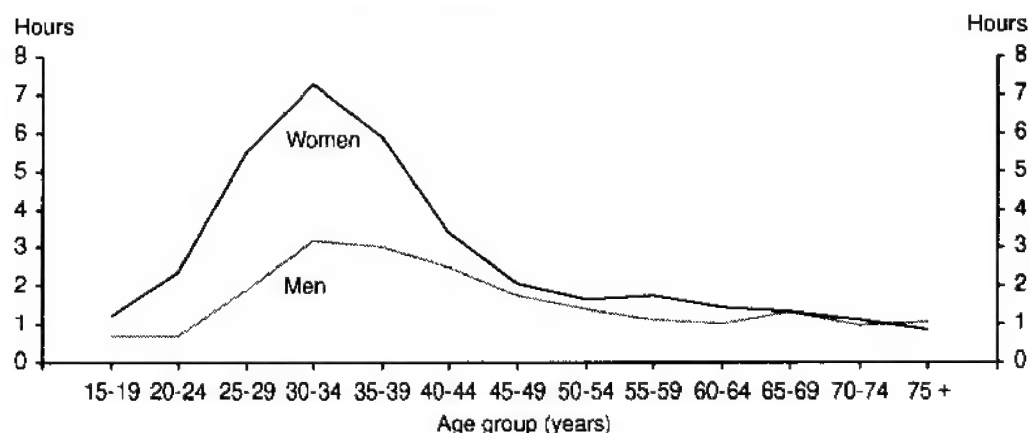
Support is any help given by a person to a relative. Because of the complexities of people's lives, it is impossible to measure all the supportive elements of a relationship. However, the ABS produces data on time spent interacting with relatives, income support, help with home or land purchasing, domestic support, and child care. *Relatives* may, or may not, be part of the same household.

Interacting with relatives includes child care activities, transport of children, socialising, conversing (including telephone conversations with relatives), and all activities outside the home with relatives.

Income support is financial assistance in excess of \$200 value provided to or received from relatives outside the household in the previous 12 months. *Help with home or land purchasing* is a loan or gift of money or other assets for housing received by a person aged 15–59 from a relative in the previous ten years. *Domestic support* is the provision or receipt, in the previous six months, of personal care or home help due to a long-term illness, disability or old age. Data were only collected on the main provider or recipient of support. Domestic assistance may be received from government or other non-family members while other forms of support listed above are restricted to family members only.

Child care is the provision of direct assistance to a child. If it is not provided by a resident parent, it is classified as formal (regulated care away from the child's home, such as pre-school or family day care), or informal (unregulated care provided by relatives, friends or baby sitters).

Average time per day spent interacting with relatives, 1992



Source: Time Use Survey

On average, 98% of mothers in couples with children under 2 years provided child care on any given day, compared to 77% of their husbands. By the time the youngest child was aged 10–14, 57% of mothers provided child care on a given day compared to 34% of fathers. This reflects the division of domestic responsibilities between mothers and fathers (see Australian Social Trends 1994 pp. 120–125 *Unpaid household work*).

Mothers whose youngest child was under 2 years old spent an average of 14 hours a day undertaking child care activities. Fathers spent four and a half hours. Some of these families also had children aged over 2 and the figures represent the total amount of time parents spent providing child care to all their children, not just the youngest.

The amount of time spent on child care declined as the age of the youngest children increased, and the nature of the child care changed. Mothers with children under 2 years spent 4 hours (29% of their total child care time) giving physical care to their children, while mothers with children aged 5–9 spent 1 hour (12% of their caring time) on physical care.

The amount of time parents spent playing with, reading to or talking to their children also decreased as the children got older. However, playing with, reading or talking to their children became a greater proportion of the total time parents spent on child care. It increased from 17% of time spent on child care by parents with children under 2 years

old to 38% for parents whose youngest child was aged 10–14.

Mothers of children under 2 years spent 6 hours more on child care than mothers of children aged 5–9. However for fathers the difference was only 45 minutes. The amount of time fathers spent in physical care of their children fell rapidly as the child got older. However the time fathers spent on most other forms of child care did not change significantly until the youngest child was aged 10–14.

Mothers of children under 15 spent 55% of all their child care time passively minding their children and fathers spent 59%. Passive minding of children represents a high proportion of all child care because it is often done at the same time as other activities, such as watching TV, cleaning, ironing or cooking.

7% of mothers and 4% of fathers of children aged under 2 years spent some time nursing a sick or disabled child on a given day. On these days mothers spent an average of 72 minutes nursing a sick child, while fathers averaged 58 minutes. The total time spent on child care on these days would be significantly higher if all child care activities were included.

Average time^(a) per day spent on child care activities^(b) by parents in couple families, 1992

Child care activities	Fathers — age of youngest child (years)				Mothers — age of youngest child (years)			
	0–1	2–4	5–9	10–14	0–1	2–4	5–9	10–14
	hours	hours	hours	hours	hours	hours	hours	hours
Physical care	0:54	0:29	0:14	0:03	3:59	1:45	0:53	0:12
Nursing of sick or disabled child	0:04	0:02	0:00	0:01	0:07	0:10	0:04	0:01
Teaching, helping, reprimanding child	0:01	0:03	0:03	0:02	0:06	0:10	0:15	0:05
Playing with, reading to, talking to child	0:56	1:01	0:57	0:24	2:16	2:02	1:41	0:45
Passive minding of child	2:41	2:23	2:34	0:29	7:25	5:27	4:29	1:02
Total child care activities	4:35	3:58	3:49	0:58	13:54	9:34	7:22	2:06
	%	%	%	%	%	%	%	%
Parents providing child care on any given day	76.8	76.0	68.6	33.8	97.6	94.3	89.1	56.9

(a) In hours and minutes.

(b) Includes child care for all children, not just the youngest, regardless of whether other activities were also undertaken at the same time.

Source: Time Use Survey

Proportion of people living with parents who paid no rent or board, 1992

Selected characteristics	20-24 years	25-34 years
	%	%
Male	42.1	34.8
Female	48.1	28.3
Employed	41.0	31.6
Unemployed	48.4	35.1
Full-time student	85.7	43.6*
Part-time student	43.9	36.8
Income over \$25,000	34.2	29.5
Total	44.6	32.5
	'000	'000
Total living with parents	537.1	248.5

Source: Survey of Families in Australia

Parents supporting older children who live at home

Parents who have children living with them can provide many forms of support, including the provision of free rent or board. Even children who pay rent or board to their parents tend to pay well below market prices. These forms of support do not necessarily indicate a burden on the parents, but they do indicate, in most cases, the receipt of support by the children.

In 1991, 40% of 20-24 year olds lived with their parents compared to 34% in 1981. This indicates that children were receiving these and other forms of support from their parents for longer than they had a decade earlier. However, as young adults got older, they were less likely to live with their parents. In 1991, 13% of 25-29 year olds and 5% of 30-34 year olds lived with their parents (see Australian Social Trends 1994 pp. 43-46 *Living with parents*).

Among children who lived with their parents, the older they were the less likely they were to pay no rent or board. In 1992, 45% of 20-24 year olds living at home paid no rent or board compared to 33% of 25-34 year olds. 86% of 20-24 year old full-time students living with their parents paid no rent or board, reflecting their greater financial dependence on their parents. Among 20-24 year olds living with their parents, women were more likely to live rent-free than men. The reverse

was true of 25-34 year olds. About 30% of children who lived with their parents and had incomes over \$25,000 a year paid no rent or board.

Parents supporting children who have left home

In 1992, 679,000 people who were no longer living with their parents had received some form of income support from their parents in the previous 12 months. The most common types of income support were a gift of cash (353,000), a household item (214,000), or food or clothing (134,000). Most of these recipients were aged in their 20s or early 30s.

45% of income support from parents to children was identified as coming from both parents acting together. In the remaining cases, the child identified only one parent as the provider but this does not necessarily mean that the other parent had no involvement in the decision. It does indicate the child's perceptions of the source of the support. Parents were most likely to be identified together as providers of regular financial assistance.

When one parent was identified as the sole provider of income support, it was more likely to be the mother, especially in providing more than \$200 as a cash gift, a household item, or food or clothing. Children were more likely to identify their father than their mother as providers of motor vehicles or regular financial assistance.

446,000 people who were no longer living with their parents received some help with home or land purchasing from their parents in the ten years to 1992. The most common forms of help were a loan of money (286,000), or a gift of money (147,000).

About 40% of help with home or land purchasing to children came from both parents acting together. However, children who received a gift of land, home or home improvements identified their father as the sole provider in 48% of cases. Mothers and fathers were about equally likely to be identified as providers of loans of money for housing.

Support received by people not living with their parents, 1992

Selected characteristic	Provider of support as reported			Total	Total
	Mother	Father	Both parents		
	%	%	%		
Income support(a)					
Cash gift of over \$200	36.2	23.8	40.0	100.0	353.4
Gift of household item	26.5	13.7	59.7	100.0	213.6
Gift of motor vehicle	24.2	32.7	43.1	100.0	32.8
Regular financial assistance	13.9	22.1	64.0	100.0	75.2
Gift of over \$200 worth of food or clothing	33.6	9.3	57.1	100.0	134.1
Gift of shares, stocks or money in trust	29.2	27.3	43.5	100.0	13.9
Bills, rent or loan repayment	24.5	25.3	50.1	100.0	112.5
Total	33.9	21.5	44.6	100.0	679.2
Help with home or land purchasing(b)					
Loan of money for housing	27.8	30.8	41.4	100.0	286.0
Gift of money for housing	25.8	33.9	40.3	100.0	147.4
Gift of land, home or home improvement	23.6	48.0	28.4	100.0	30.3
Total	27.4	32.6	40.1	100.0	445.7

(a) People who received income support from their parents in the previous 12 months.

(b) People who received help with home or land purchasing from their parents in the previous ten years.

Source: Survey of Families in Australia

Support for older people

In 1992, 24% (434,000) of people aged 65 or more had received personal care or home help in the previous six months. About half of these people (211,000) received their main assistance from relatives while most of the rest received their main assistance from government or voluntary organisations.

Children were the main providers of help for 49% of aged people who received care from their relatives. Daughters provided

significantly more assistance than sons and also provided a wider range of assistance. Daughters provided more meals, housework, personal care and general nursing than sons. Sons provided more home repairs and maintenance than daughters. This is consistent with the patterns observed in unpaid household work generally.

People aged 75 and over are more likely to receive care from their children than people aged 65-74. This is because they are more likely to need care, and they are less likely to

People aged 65 years or more who received main domestic assistance from relatives, 1992

Domestic assistance	Son %	Daughter %	Total children(a) %	Spouse %	Other family %	Total %	Total '000
Meals	9.1	29.4	42.5	45.8	11.7	100.0	130.7
Housework	10.2	32.0	47.0	39.7	13.3	100.0	159.0
Repairs/maintenance	31.8	19.7	56.0	28.8	15.3	100.0	99.8
Personal care	9.3	26.5	37.1	51.2	11.7	100.0	77.7
Nursing care	12.8	25.3	38.5	48.5	13.1	100.0	57.8
All domestic assistance(b)	17.3	28.0	49.4	34.2	16.4	100.0	211.2

(a) Includes cases where the main source of domestic assistance is provided by more than one child.

(b) Since people may receive more than one type of domestic assistance, components may not add, or average, to totals.

Source: Survey of Families in Australia

have a spouse to care for them. 38% of people aged 65–74 who received domestic assistance from relatives received it from their children compared to 59% of people aged 75 and over.

37,000 people aged 65–74 received their main source of domestic assistance from their children. The numbers of sons (16,000) and daughters (17,000) providing this assistance were similar. However, there were more than twice as many people aged 75 and over who received their main source of domestic assistance from their daughters (42,000) as from their sons (20,000). This is because older people need more nursing and personal care which daughters usually provide.

Spouses tend to provide a wider range of support than other relatives. 72,000 people identified their spouse as the main provider of at least one form of domestic assistance. On average, these spouses were identified as the main provider of 3 of the 5 types of domestic assistance.

Grandparents as child carers

In 1992 there were 1.8 million families with children under 12 years. In 35% of these, grandparents were the main providers of informal child care. Grandparents were more likely to be providers of informal care for younger children than for older children. For 46% of families with the youngest child aged under 2 years grandparents provided the main source of informal care compared to 26% of families with children aged 5–11. Reasons for this difference include a lesser need for child care once a child starts school and the presence of older siblings who can act as baby sitters.

Main providers^(a) of informal child care, 1992

	Age of youngest child (years)			
	0–1	2–4	5–11	Total
	%	%	%	%
No informal care	30.1	28.0	40.2	33.9
<i>Maternal grandparents</i>	34.5	29.2	19.8	26.7
Grandmother	29.3	23.9	14.0	21.2
Grandfather	1.0	0.5	1.2	1.0
Grandparents	4.1	4.9	4.5	4.5
<i>Paternal grandparents</i>	11.4	9.7	6.3	8.7
Grandmother	9.1	7.5	4.9	6.9
Grandfather	0.2	0.8	0.4	0.4
Grandparents	2.2	1.4	1.0	1.4
Other relatives	10.3	11.0	17.1	13.4
Other person	13.7	22.0	16.6	17.2
Total	100.0	100.0	100.0	100.0

	'000	'000	'000	'000
Total families	517.5	471.3	763.9	1 752.6

(a) The main provider of child care is the individual, other than a resident parent, who provides the most child care for the family, not necessarily to the youngest child.

Source: Survey of Families in Australia

Maternal grandparents were more likely than paternal grandparents to be the main providers of informal child care, 27% compared to 9%. Grandmothers were also more likely than grandfathers, or both grandparents, to be the main provider of child care.

Related ABS publications

- ◆ Focus on Families (4420.0 – 4425.0)
- ◆ How Australians Use Their Time — Selected Findings from the 1992 Time Use Survey, Australia (4153.0)

Health

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HEALTH STATUS

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A girl born in 1993 has a one-in-four chance of reaching 90 years of age.
For a boy the probability is one-in-ten.

Older people with disabilities.....55

In 1993, 56% of people aged 65 and over had a disability. 89% of them lived in households rather than institutions.

CAUSES OF DEATH

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As the population ages, there is a greater likelihood that people will die from cancer and other age-related diseases. The cancer death rate has increased by 4% over the past two decades.

RISK FACTORS

Alcohol use.....62

Australians now drink more light beer than ever before. The consumption of other types of alcoholic beverages has decreased since the mid 1980s.

Health — national summary

HEALTH STATUS	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Male life expectancy at birth	years	72.1	72.5	72.4	72.9	73.1	73.1	73.3	73.9	74.4	74.5	75.0
Female life expectancy at birth	years	78.8	79.0	78.8	79.2	79.5	79.5	79.6	80.1	80.4	80.4	80.9
Total number of deaths	'000	110.1	109.9	118.8	115.0	117.3	119.9	124.2	120.1	119.1	123.7	121.6
Crude death rate (per 1,000 population)	no.	7.2	7.1	7.5	7.2	7.2	7.2	7.4	7.0	6.9	7.1	6.9
Standardised death rate (per 1,000 population)	no.	7.5	7.5	7.6	7.2	7.1	7.1	7.1	6.7	6.5	6.5	6.6
Infant mortality rate (per 1,000 live births)	no.	9.6	9.2	10.0	8.8	8.7	8.7	8.0	8.2	7.1	7.0	6.1
Perinatal mortality rate (per 1,000 live births)	no.	12.2	11.9	11.8	11.5	10.6	10.7	9.9	10.3	9.6	9.4	8.2
CAUSES OF DEATH	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Ischaemic heart disease death rate (per 100,000 population)	no.	204	199	207	200	197	191	194	183	175	180	168
Cancer death rate (per 100,000 population)	no.	166	166	175	174	174	179	179	179	181	183	185
Road accident death rate (per 100,000 population)	no.	18	17	19	19	17	19	17	15	13	12	11
Suicide death rate (per 100,000 population)	no.	11	11	12	12	14	13	12	13	14	13	12
AIDS related death rate (per 100,000 population)	no.	n.a.	n.a.	n.a.	n.a.	n.a.	1	2	3	3	4	4
RISK FACTORS	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Alcohol: apparent consumption per person per day	ml	34.2	33.4	31.5	31.8	30.4	30.3	29.8	29.2	28.0	26.9	26.0
Tobacco: apparent consumption per person per day	grms	7.2	6.9	6.7	6.5	6.1	6.0	5.7	5.8	5.4	5.4	4.8
Total fats: apparent consumption per person per day	grms	59.2	59.0	57.5	57.4	56.3	55.8	55.4	54.5	53.7	53.7	52.2
SERVICES	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Average Medicare services processed per person	no.	n.a.	n.a.	7.1	7.5	7.8	8.0	8.3	8.3	8.2	8.6	9.8
Acute hospital beds per 1,000 population	no.	6.1	5.9	5.8	5.7	5.4	5.3	5.2	5.0	5.0	4.5	4.4
Average length of stay in hospital	days	6.9	6.7	6.7	6.5	6.3	6.2	5.9	5.6	5.1	4.8	4.8
Doctors per 100,000 population	no.	n.a.	n.a.	n.a.	210	n.a.	n.a.	n.a.	n.a.	230	n.a.	n.a.
EXPENDITURE	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Persons with private health insurance (of population)	%	65.4	n.a.	n.a.	53.1	n.a.	52.0	n.a.	52.0	n.a.	47.8	n.a.
Total health expenditure per person per year (constant prices)	\$	1 352	1 420	1 458	1 521	1 571	1 605	1 664	1 703	1 710	1 724	1 768
Total health expenditure as a proportion of GDP (constant prices)	%	7.5	7.5	7.5	7.6	7.8	7.7	7.7	7.8	8.0	8.1	8.2

Reference periods:

Risk factor data, services data except doctors per 100,000 population, and expenditure data are for the year ended 30 June.

Health — state summary

HEALTH STATUS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Male life expectancy at birth	years	1993	74.8	75.4	75.1	75.0	75.1	73.9	69.2	76.2	75.0
Female life expectancy at birth	years	1993	80.8	81.1	81.0	80.5	81.2	80.1	73.8	82.3	80.9
Total number of deaths	'000	1993	43.1	31.2	20.0	11.5	10.3	3.6	0.8	1.1	121.6
Crude death rate (per 1,000 population)	no.	1993	7.2	7.0	6.4	7.9	6.2	7.7	4.5	3.7	6.9
Standardised death rate (per 1,000 population)	no.	1993	6.7	6.5	6.5	6.8	6.6	7.2	10.0	5.9	6.6
Infant mortality rate (per 1,000 live births)	no.	1993	6.2	5.4	7.0	5.2	5.9	5.9	15.3	4.3	6.1
Perinatal mortality rate (per 1,000 live births)	no.	1993	8.5	7.5	8.1	7.6	7.3	9.5	19.3	7.2	8.2
CAUSES OF DEATH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Ischaemic heart disease death rate (per 100,000 population)	no.	1993	178	164	166	199	149	174	54	75	168
Cancer death rate (per 100,000 population)	no.	1993	191	194	172	203	167	196	94	116	185
Road accident death rate (per 100,000 population)	no.	1993	9	10	13	14	13	13	24	4	11
Suicide death rate (per 100,000 population)	no.	1993	12	11	12	11	13	18	13	9	12
AIDS related death rate (per 100,000 population)	no.	1993	7	3	3	2	2	1	3	2	4
RISK FACTORS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
High risk drinkers (of persons 18 years and over)	%	1989-90	4.7	3.7	4.9	3.9	3.7	2.8	9.1	5.2	4.3
Current smokers (of persons 18 years and over)	%	1989-90	28.8	27.6	28.4	27.8	28.1	28.8	39.8	30.3	28.4
Acceptable weight (of person 18 years and over)	%	1989-90	48.3	48.3	47.3	46.5	48.2	48.2	40.7	52.8	48.0
Fully immunised children aged six years (of six year olds)	%	1989-90	64.7	67.0	76.4	68.8	73.2	61.8	71.7	72.2	68.7
SERVICES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Average Medicare services processed per person	no.	1993-94	11.2	9.9	9.8	9.8	8.9	8.9	6.1	8.5	10.1
Acute hospital beds per 1,000 population	no.	1992-93	4.3	4.3	4.6	5.1	4.0	4.6	4.3	3.3	4.4
Average length of stay in hospital	days	1992-93	4.7	4.7	4.7	5.0	4.7	4.9	5.0	4.7	4.8
Doctors per 100,000 population	no.	1991	239	235	212	256	206	204	210	238	230
EXPENDITURE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Persons with private health insurance (of population)	%	1992	50.0	46.6	38.3	54.4	53.3	50.0	44.7	53.7	47.8

Health — definitions and references

- Acceptable weight** — the estimates are based on Quetelet's body mass index (BMI), which is calculated as weight (in kilograms) divided by the square of height (in metres). Persons classified as acceptable weight had a BMI of 20.0–25.0.
Reference: National Health Survey: Health Risk Factors (4380.0)
- Acute hospital beds per 1,000 population** — total number of beds in all hospitals per 1,000 estimated mean resident population.
Reference: Department of Health, Housing and Community Services *Annual Report*
- AIDS related deaths** — deaths where AIDS was determined to be the underlying cause.
Reference: Causes of Death (3303.0)
- Alcohol: apparent consumption** — millilitres of alcohol, not total alcoholic beverages, consumed divided by the population aged 15 years and over. Apparent consumption of beer and spirits is based on quantities on which excise duty was paid and imports cleared for consumption in Australia. Apparent consumption of wine comprises quantities sold by winemakers and imports cleared for consumption. Home made beer and wine is excluded.
Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)
- Apparent consumption** — equals (commercial production + estimated home production + imports + opening stocks) minus (exports + usage for processed food + non-food usage + wastage + closing stocks) divided by the population.
Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)
- Average length of stay in hospital** — the total number of occupied bed days in both public and private hospitals divided by the total number of admissions.
Reference: Australian Institute of Health and Welfare *Health Expenditure*
- Average Medicare services processed** — average number of services used per person enrolled in Medicare.
Reference: Health Insurance Commission *Annual Report*
- Cancer** — malignant neoplasms.
Reference: Causes of Death, Australia (3303.0)
- Crude death rate** — number of deaths registered during the calendar year per 1,000 of the mean estimated resident population.
Reference: Deaths, Australia (3302.0)
- Current smokers** — persons aged 18 years and over who smoke one or more manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes per day. Smoking excludes chewing tobacco and smoking of non-tobacco products.
Reference: National Health Survey: Health Risk Factors (4380.0)
- Doctors per 100,000 population** — the number of general medical practitioners and specialist medical practitioners per 100,000 mean estimated resident population.
Reference: Characteristics of Persons Employed in Health Occupations, Australia (4346.0)
- Fetal death** — the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat.
Reference: Perinatal Deaths, Australia (3304.0)
- Fully immunised** — the proportion of children reported as having received all the required vaccinations for diphtheria, tetanus, poliomyelitis, whooping cough, measles and mumps for their age.
Reference: National Health Survey: Children's Immunisation, (4379.0)
- High risk drinkers** — men who drank more than 75ml of absolute alcohol per day and women who drank more than 50ml of absolute alcohol per day.
Reference: National Health Survey: Health Risk Factors, (4380.0)
- Infant mortality rate** — the annual number of deaths of children under one year of age per 1,000 live births.
Reference: Deaths, Australia (3302.0)
- Ischaemic heart disease** — heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris).
Reference: Causes of Death (3303.0)
- Life expectancy at birth** — the average number of years a person might expect to live if the age-specific death rates of the given period continued throughout his or her lifetime.
Reference: Deaths, Australia (3302.0)
- Live birth** — the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who after being born, breathes or shows any other evidence of life such as a heartbeat.
Reference: Perinatal Deaths, Australia (3304.0)
- Neonatal death** — any child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who is born alive (as defined under live birth) and who dies within 28 days of birth.
Reference: Perinatal Deaths, Australia (3304.0)
- Perinatal mortality rate** — the number of fetal and neonatal deaths per 1,000 live births and fetal deaths combined.
Reference: Perinatal Deaths, Australia (3304.0)
- Persons with private health insurance** — proportion of the total population with private health insurance.
Reference: Health Insurance Survey (4335.0)
- Road accident**
Reference: Causes of Death (3303.0)
- Standardised death rate** — the overall death rate that would have prevailed in a standard population if it had experienced at each age the death rates of the population being studied. The standard population used in these calculations is the 1991 Australian population.
Reference: Deaths, Australia (3302.0)
- Suicide**
Reference: Causes of Death (3303.0)
- Tobacco: apparent consumption** — grams of tobacco consumed divided by the population aged 15 years and over. Apparent consumption of tobacco is based on the quantity on which import duty and excise was paid and does not include duty or excise free tobacco.
Reference: Customs and Excise Revenue, Australia (5425.0)
- Total fats: apparent consumption** — the total fat content of food apparently consumed, in grams, divided by the total population.
Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)
- Total health expenditure as a proportion of GDP** — total health expenditure as a proportion of gross domestic product at constant 1989–90 prices.
Reference: Australian Institute of Health and Welfare *Health Expenditure*
- Total health expenditure per person** — total health expenditure per person in Australian dollars at constant 1989–90 prices.
Reference: Australian Institute of Health and Welfare *Health Expenditure*

Life expectancy trends

HEALTH STATUS

Increasing life expectancy has been an important social change this century. In the period 1901-10 the average life expectancy of a new-born boy was 55 years and that of a new-born girl 59 years. By 1993, a new-born boy had a life expectancy of 75 years and a new-born girl 81 years; an increase of 20 years for boys and 22 years for girls.

The increase in life expectancy is mainly due to fewer deaths of young children, particularly in the first year of life (infant mortality). The high mortality rates among infants during the period 1901-10 (about 1 in 10 died in the first year of life) kept the average life expectancy at birth low. Children who survived these early years then had life expectancies nearer to those currently experienced. For example, the life expectancy of a 5 year old boy differed by 13 years between 1901-10 and 1993 compared to 20 years for a new-born boy.

The reduction in mortality in the early part of this century is attributed to improvements in social conditions, such as better water supplies, sewage systems, food quality, health education etc. The continuing reduction in mortality in the latter half of the century is attributed to improving social conditions and advances in medical technology such as mass immunisation and antibiotics¹.

The past two decades in particular have seen further increases in life expectancy, both at

Life expectancy

Life expectancy is a measure of current mortality rather than a predictor of future lifespan since age-specific death rates can change over time. Life expectancy at birth is often wrongly interpreted to mean that most people die at that age. The average life expectancy gives no indication of the variation in life expectancies.

Life expectancy is the average number of additional years a person of a given age and sex might expect to live if they experience the current age-specific death rates from that age onwards through the rest of their life. Life expectancy is calculated separately for each sex. This is done one year at a time by taking a hypothetical group of new-born babies and, using the current probability of dying at each year of age, calculating the expected number of survivors at each age. The expected number of survivors slowly diminishes until the whole group have 'died'. Life expectancy at an age is calculated by dividing the number of person-years lived beyond that age by the number of people alive at that age.

Age-specific death rate is the number of deaths at a specified age in a year per 1,000 of the mid-year population of that age. Age-specific death rates are used to calculate the probability of dying at a particular age.

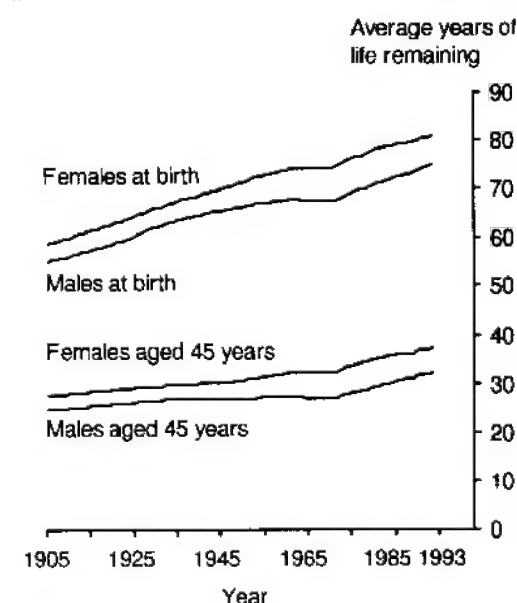
A girl born in 1993 has a one-in-four chance of reaching 90 years of age. For a boy the probability is one-in-ten.

Life expectancy at selected ages

Period/year	Average years of life remaining at age			
	0	5	45	75
Men				
1901-1910	55.2	57.9	24.8	6.6
1932-1934	63.5	62.6	26.9	7.2
1960-1962	67.9	64.8	27.4	7.5
1993	75.0	70.6	32.5	9.5
Women				
1901-1910	58.8	60.8	27.6	7.6
1932-1934	67.1	65.6	29.7	8.2
1960-1962	74.2	70.8	32.4	9.2
1993	80.9	76.4	37.4	12.0

Source: Australian Life Tables; Death Registrations

Life expectancy at selected ages



Source: Australian Life Tables; Death Registrations

International comparison

Australians have an average life expectancy that compares well with other developed nations. Among the selected countries with data for 1990–91, the life expectancy at birth of Australian males and females (74 and 80 years respectively) was exceeded by three countries. Japanese males and females had the highest life expectancies (76 years and 82 years respectively).

Life expectancy at birth for selected countries

Country	Year/ period	Males	Females
		Years	Years
Australia	1991	74.4	80.3
Canada	1985–87	73.0	79.8
China(a)	1985–90	68.0	70.9
France	1990	72.8	80.9
Hong Kong	1990	74.6	80.3
Indonesia(a)	1985–90	58.5	62.0
Italy	1989	73.5	80.0
Japan	1991	76.1	82.1
Korea (Republic of)	1989	66.9	75.0
Malaysia(a)	1985–90	67.5	71.6
New Zealand	1989	72.4	78.3
PNG(a)	1985–90	53.2	54.7
Singapore	1991	73.5	78.0
Sweden	1991	74.9	80.5
UK	1988–90	72.7	78.3
USA	1989	71.8	78.6

(a) Estimated by the Population Division of the UN.

Source: United Nations Demographic Yearbook 1992

birth and at older ages. These increases are due in part to lower infant mortality, fewer deaths among young adults from motor vehicle accidents and fewer deaths among older males from heart disease. The reduction in the number of deaths from heart disease is related to behavioural changes, such as dietary improvements, reduced smoking and increased fitness¹.

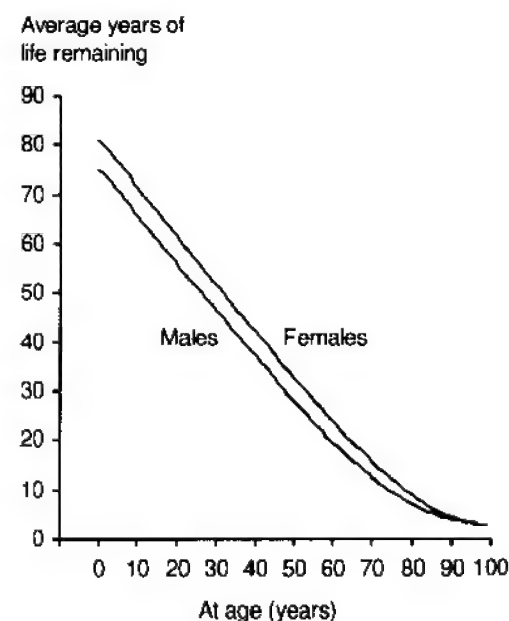
The social effects of improved life expectancy at older ages include an increase in the aged population and the associated issues of income support for the aged and their need for health resources. However, the impact on the individual receives little attention. Laslett

uses the term the *Third Age* to refer to the lengthy period of active life following retirement and points out that it is a distinct and significant phase in most people's lives. He considers it to be an era of personal fulfilment². Mortality statistics cannot tell us if the years of extra life can, or will improve an individual's quality of life. A 1992 report recommended that the Commonwealth Government recognise that 'the changing demographic structure of the population requires reassessment of the value and importance, both socially and economically, of life outside traditional work'³.

Life expectancy at different ages

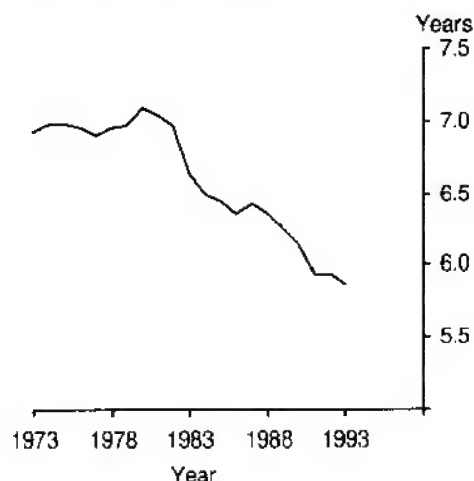
Although life expectancy at birth is commonly used, particularly as a measure of comparative health status, it is possible to calculate life expectancy at any age. No matter how old a person becomes, they always have some chance of living longer. For example, life expectancy at birth in 1993 was 81 years for girls and 75 years for boys. However, at age 80 years, female life expectancy was an additional 9 years and male life expectancy an additional 7 years. The difference between life expectancies for males and females reduces with age as their mortality rates converge.

Life expectancy by age, 1993



Source: Death Registrations

Difference between female and male life expectancy at birth



Source: Death Registrations

Life expectancy for men and women

In 1993 a new-born girl had a life expectancy 6 years greater than a new-born boy. This life expectancy advantage of females over males has varied over time. Throughout the early part of this century it was about 4 years. In the latter half the difference increased, peaking at 7 years in the early 1980s. Since then the difference has steadily declined.

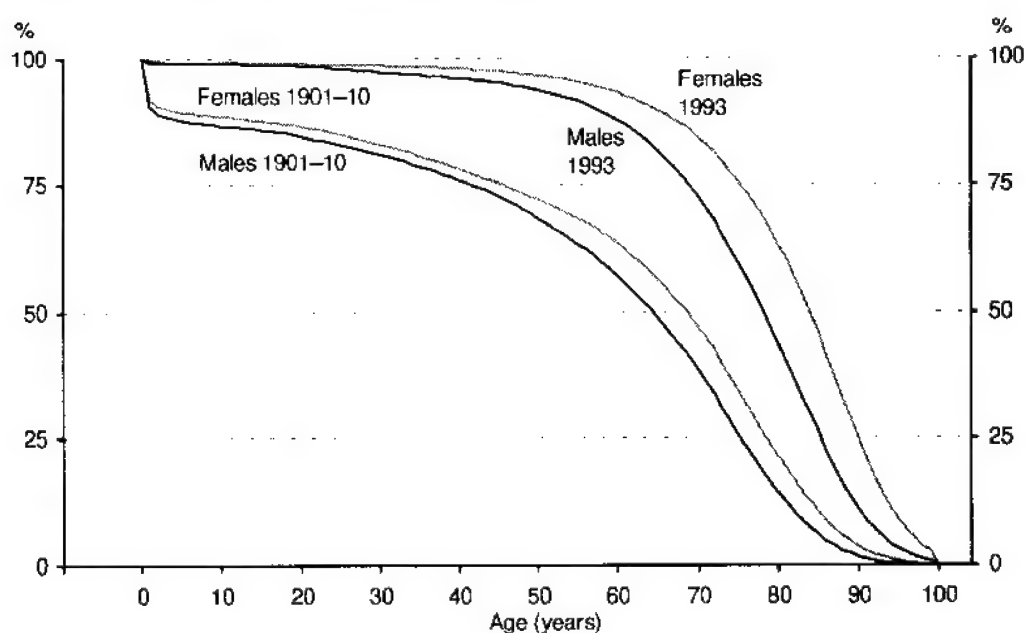
The difference in life expectancy between males and females has been attributed to both biological and environmental factors. Females are estimated to have a genetic advantage of about two years of life over males⁴. The remaining differences are attributed to the different behavioural and lifestyle patterns of males and females which result in different mortality rates. For example, in 1981, the life expectancy difference between females and males at birth was 7 years. The major reasons for this difference were the different death rates for males and females from heart disease; bronchitis; emphysema; asthma; cancers of the lung, trachea and bronchus; and accidents, particularly motor vehicle accidents⁵. These causes of death are related to smoking (see Australian Social Trends 1994 pp. 60-65 *Tobacco use*), which is more prevalent among men, and the risk taking behaviour of men, particularly young men.

Since the early 1980s, the difference in life expectancy between males and females has decreased while average life expectancy for both men and women has continued to increase. This has been due to the faster decline of mortality rates among males than females.

Survival

In 1901-10 half of new-born boys could have been expected to reach 64 years of age and half of new-born girls could have been

Proportion of people surviving to a given age (survival curves)



Source: Australian Life Tables; Death Registrations

Survival curves

Like life expectancies, *survival curves* are based on the probability of death at each age. However, rather than estimating the average length of life, they show the proportion of people expected to survive to a given age, assuming that the age-specific death rates of the period remain constant.

expected to reach 68 years of age. The equivalent figures in 1993 were 78 years for males and 84 years for females.

The high mortality at young ages in 1901–10 is vividly demonstrated by comparing the survival curves with those for 1993. In 1901–10, 25% of males would have died by the age of 42 years and 25% of females by the age of 45 years (if the age-specific death rates had remained constant). In 1993, mortality rates were much lower and, if they remained constant, 25% of males would die before the age of 69 years and 25% of females before the age of 76 years.

Comparison of survival ages for the longest living 25% of each group reveals a smaller difference between 1901–10 and 1993. During 1901–10, 25% of males would have still been alive after 75 years and 25% of females after 79 years. In 1993, the period will be 85 years for males and 90 years for females.

Aboriginal and Torres Strait Islander life expectancy

There are data limitations in calculating life expectancy figures for indigenous people. The current ABS assessment is that registrations of deaths of indigenous people in SA, WA, NT and ACT are reliable enough to publish. To calculate age-specific death rates the total number of people of that age must also be

accurately known. Census counts of indigenous people are acknowledged to be incomplete, though the quality of the count has constantly improved. Because of these difficulties the ABS has only recently published experimental estimates for indigenous people.

Independent researchers have used alternative methods to estimate life expectancies of indigenous people. Recent research used 1986 and 1991 census counts and death registrations to estimate the life expectancy at birth of indigenous males to be 57 years, and for indigenous females to be 64 years⁶. There were considerable variations in the estimates between different states and territories.

Endnotes

- 1 Jain, S.K. (1994) *Trends in Mortality* National Centre for Epidemiology and Population Health and ABS.
- 2 Laslett, P. (1989) *A Fresh Map of Life: The Emergence of the Third Age* Weidenfeld and Nicolson, London.
- 3 Report of the House of Representatives Standing Committee for Long Term Strategies (1992) *Expectation of Life: Increasing the Options for the 21st Century* AGPS.
- 4 Hugo, G. (1986) *Australia's Changing Population* Oxford University Press.
- 5 Pollard, J.H. (1986) *Causes of Death in Australia 1971–81* Journal of the Australian Population Association Vol.3, No.1, 1986.
- 6 Gray, A. and Tesfaghiorghis, H. (1993) *Aboriginal Population Prospects* Journal of the Australian Population Association Vol.10, No.2, 1993.

Related ABS publications

- Deaths, Australia (3302.0)

Older people with disabilities

HEALTH STATUS

In 1993, 56% of people aged 65 and over had a disability. 89% of them lived in households rather than institutions.

In the twenty years to 1994 the median age of the Australian population increased by 5.6 years, to 33.4 years (see *Population — national summary table p. 2*). The number of people aged 65 and over grew at a faster rate than the Australian population as a whole. In 1994 there were more than twice as many people aged 85 and over as there had been in 1974.

The presence of disability and handicap is strongly related to age. Disability rates and handicap rates for people aged 65 and over are significantly higher than for younger people. Apparent changes in the overall level of disability in the population may therefore be principally a result of the growing numbers of people in older age groups. However, because of these increasing numbers, the patterns of disability have consequences for provision of services and development of program policies.

Changes in disability and handicap rates

In 1981, 13% of the population had a disability and of these 31% (594,100 people) were aged 65 and over. In 1988, 16% of the population had a disability and 36% of these were aged 65 and over.

Comparing the two populations, it was estimated that about half the difference between 1981 and 1988 was attributable to

Proportion of the population with disabilities and handicaps

Age group (years)	1981	1988	1993
	%	%	%
With a disability			
65-74	35.5	44.2	48.8
75 & over	53.1	63.5	66.7
All people	13.2	15.6	18.0
With a handicap			
65-74	24.1	35.0	39.3
75 & over	45.4	58.1	61.0
All people	8.6	13.0	14.2

Source: Handicapped Persons Survey (1981); Survey of Disabled and Aged Persons (1988); Survey of Disability, Ageing and Carers (1993)

Disability and handicap

In the context of health experience the World Health Organisation International Classification groups together impairments, disabilities and handicaps. An *impairment* is defined as any loss or abnormality of psychological or physical functioning. An impairment may lead to a *disability*, defined as any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

In the ABS surveys of disability and handicap, a series of screening questions on limitations, restrictions and impairments were asked about each individual, to identify those persons with disabilities. In 1993, three additional screening questions were included because of concern that earlier surveys missed specific groups of people with disabilities.

A *handicap* is identified as a limitation in performing certain tasks associated with daily living. The limitation must be due to a disability and be in relation to one or more of the following areas:

- ◆ self care;
- ◆ mobility;
- ◆ verbal communication.

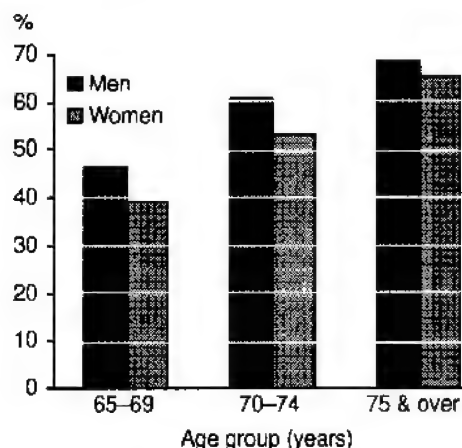
Severity of handicap (profound, severe, moderate or mild) is determined by the ability to perform relevant tasks and by the amount and type of help required.

People with a disability do not necessarily have a handicap; people with a handicap always have a disability.

changes in the size and composition of the total population. Changing community attitudes, perhaps influenced by the International Year of Disabled People in 1981, may also have resulted in greater willingness to admit to disabling conditions, and therefore an increase in the numbers identified through the screening questions as having a disability.

In 1993, 18% of the population (3.2 million people) were identified as having a disability. 36% were aged 65 and over. The overall population proportion showed an apparent increase of two percentage points between 1988 and 1993. However, when the data are standardised to allow for the change in the age structure of the population and for the change in the definition of disability between the two surveys, it is estimated that there was

Proportion of people with a disability, 1993



Source: Survey of Disability, Ageing and Carers

an increase of 0.6% in the overall proportion of people with a disability. Comparisons of the standardised data for people with a handicap indicate that overall there was a decrease of 0.4% in the proportion with a handicap.

In the 65-74 years age group the proportion of people with a disability increased from 36% in 1981 to 49% in 1993. The proportion of people who had a handicap also increased, from 24% in 1981 to 39% in 1993. This represented an increase from 68% to 80% in the proportion of people with a disability who also had a handicap.

Among people aged 75 and over, the proportions were much higher but the patterns of increase were similar. In 1981, 53% of this age group had a disability and 45% had a handicap. In 1993, 67% had a

disability and 61% had a handicap. This represented an increase from 86% to 91% in the proportion of people with a disability who also had a handicap.

In comparison, in 1993, 7% of young adults (aged 15-24) had a disability and 5% also had a handicap.

In 1993, men in nearly all age groups were more likely to have a disability than women. However, because of the larger numbers of women surviving to older ages, the number of women aged 70 and over who had a disability was 36% larger than the number of men (491,600 compared to 361,200).

Area of handicap

In both 1988 and 1993 about three-quarters of all people with a handicap reported limitations to their mobility. These limitations varied from difficulty in using public transport, in going to places away from their home, or in moving to and from their bed or chair, according to the severity of their handicap. Difficulties with mobility were more likely to be experienced by the older age groups. In 1993, 87% of people aged 75 and over with a handicap experienced difficulty in mobility compared to 81% of those aged 65-74.

In 1988 and 1993 about 40% of all people with a handicap experienced limitations to self care, that is, difficulty with activities such as eating, showering, dressing or toileting. Again limitations were more likely to be reported by the older age groups. In 1993, 59% of people aged 75 and over experienced such difficulties.

Persons with a handicap by selected areas of handicap

Area of handicap(a)	1988			1993		
	65-74 years	75 years and over	All persons	65-74 years	75 years and over	All persons
	%	%	%	%	%	%
Self care	45.5	64.1	42.8	41.1	58.7	39.6
Mobility	89.4	93.1	77.0	80.7	87.0	73.1
Communication	24.6	37.9	18.9	20.2	38.4	19.2
	'000	'000	'000	'000	'000	'000
Total with handicap	383.3	398.7	2 120.6	484.6	496.6	2 500.2

(a) Percentages do not add to 100% because people may have had a handicap in more than one area.

Source: Survey of Disabled and Aged Persons (1988); Survey of Disability, Ageing and Carers (1993)

Living arrangements

Responding to changes in government and community attitudes, recent programs have been designed to avoid premature or inappropriate admission to long-term residential care for older people or people with disabilities. Instead, basic support services have been developed to help people be independent at home and in the community.

In 1993, 138,900 people aged 65 and over, 7% of the age group, lived in a health establishment of some kind. 95% of these institution residents had a disability and 87% also had a handicap, most of which were classified as profound.

Of the 1.9 million people aged 65 and over living in households, 53% had a disability and 45% also had a handicap. People with a handicap living in households were less likely than those in institutions to have a profound or severe handicap; 28% were so classified. A further 22% were classified as having a moderate handicap.

Overall, 96% of people aged 65–74 who had a disability lived in households, as did 80% of people aged 75 or more with a disability. Even those with a profound handicap were more likely not to live in institutions,

although the proportion was reduced in the oldest age group.

In 1993 about one-third of non-institutionalised people aged 65 and over with a disability lived alone, a slightly higher proportion than of those without a disability.

Help with activities

People with a disability living in households may nevertheless need help with one or more everyday living activities other than the primary areas of limitation. They may need help or supervision to carry out certain tasks, or might find it difficult to do the task alone. People without a disability may also have such difficulties and the need for help was increasingly reported as age increased. In 1993, 21% of people aged 65–69 without a disability needed some help with one or more activity, compared to 49% of those aged 75 and over. For people with a disability, the pattern of help needed was very similar but at a higher rate, 49% of those aged 65–69 and 78% of those aged 75 and over.

People with a disability were most likely to need help with home maintenance, as were those without a disability aged 70 and over. Assistance with transport was important for both groups.

Help needed by people living in households, 1993

Type of help needed	65–69 years	70–74 years	75 years and over
	%	%	%
Persons with a disability			
Home help	20.9	28.0	46.7
Home maintenance	38.0	47.0	65.7
Meal preparation	5.4	5.3	14.9
Personal affairs	6.9	7.9	19.4
Transport	27.2	31.8	54.0
Total needing help	49.3	57.8	77.8
Persons without a disability			
Home help	2.9	5.4	11.4
Home maintenance	10.1	17.2	33.5
Meal preparation	**	**	**
Personal affairs	2.1	2.1*	4.6
Transport	12.9	15.4	28.6
Total needing help	21.4	29.3	49.2

(a) Components do not add to totals because people may need help with more than one activity.

Source: Survey of Disability, Ageing and Carers

Related ABS publications

- ◆ Disability, Ageing and Carers, Australia: Summary of Findings (4430.0)

Cancer trends

CAUSES OF DEATH

As the population ages, there is a greater likelihood that people will die from cancer and other age-related diseases. The cancer death rate has increased by 4% over the past two decades.

In 1993, 32,691 people died of cancer, 18,479 males and 14,212 females. This accounted for around 1 in 4 of all deaths. Four types of cancer caused 45% of all cancer deaths; lung cancer (6,380 deaths), colon cancer (3,308 deaths), breast cancer (2,641 deaths) and prostate cancer (2,544 deaths). Lung cancer was the most common cause of cancer death among men while for women it was breast cancer.

The ageing of the population, exposure to both carcinogenic and anti-carcinogenic agents, and causes of morbidity and death other than cancer affect cancer death rates¹. Since many cancers at advanced stages remain incurable, preventative measures, such as early screening programs and changes in lifestyle, are the most effective ways to reduce cancer deaths.

Cancer deaths 1973-93

In 1993, the standardised death rate in Australia was lower than in 1973. This was mainly due to advances in medical technology, and the leading of healthier lifestyles through better diets, regular exercise, and reductions in tobacco and alcohol consumption. The result of these changes is that people were more likely to die from cancer in 1993 because they were not dying from other causes of death at earlier ages.

Leading cancer deaths, 1993

Cancer type	Males no.	Females no.	Persons no.
Lung	4 552	1 828	6 380
Colon	1 706	1 602	3 308
Breast (female)	..	2 641	2 641
Prostate	2 544	..	2 544
Pancreas	771	705	1 476
Lymphoid	681	594	1 275
Stomach	791	447	1 238
Rectum	653	477	1 130
Brain	546	387	933
Melanoma	575	279	854
All cancers	18 479	14 212	32 691

Source: Causes of Death

Cancer deaths

Cancer (malignant neoplasm) is a term that refers to several diseases which result when the process of cell division, by which tissues normally grow and renew themselves, becomes uncontrolled and leads to the development of malignant cells¹. These cancer cells multiply in an uncoordinated way to form a tumour. If left untreated most malignant tumours will eventually result in death. Cancers are classified according to where they initially develop in the body.

Cancer deaths are deaths where the primary cause, as indicated on the death certificate, is cancer.

The *age-specific death rate* is the number of deaths in a particular age-sex group per 100,000 people in the same group. Age-specific death rates allow comparisons between age groups over time.

The *standardised death rate* allows comparisons to be made between populations which have different age structures. To calculate the standardised death rate the age-specific death rates are applied to a standard population. The standard population used in this review is the 1991 Australian population.

In 1993, cancers were the leading cause of death, exceeding heart attacks by almost 3,000 deaths. Of the major causes of death in 1993 (including cancers, heart attacks and strokes) only the death rate from cancer had increased since 1973. The cancer death rate increased from 173 deaths per 100,000 population in 1973 to 180 deaths per 100,000 population in 1993. In comparison the death rate from heart attacks in 1993 was almost half the rate recorded in 1973. Both male and female cancer death rates rose between 1973 and 1993. The rate for males rose more rapidly than the rate for females.

Males are more likely to die from cancer than females. In 1993, the cancer death rate for males was 236 per 100,000 population, while for women it was 141. In the past men were more likely than women to smoke, consume alcohol and experience other health risk factors such as occupational stress. These factors have contributed to the higher cancer death rates for men compared to women.

Of the leading cancer death rates, only those for stomach cancer declined significantly

Standardised cancer death rate^(a)

Cancer type	Males		Females	
	1973	1993	1973	1993
	rate	rate	rate	rate
Lung	61	57	9	19
Colon(b)	20	22	20	15
Breast (female)	..	..	26	27
Prostate	28	35	..	..
Pancreas	12	10	7	7
Lymphoid	n.a.	8	n.a.	6
Stomach	20	10	10	4
Rectum(b)	9	8	6	5
Brain(b)	4	6	3	4
Melanoma	4	7	3	3
All cancers	224	236	138	141

(a) Standardised death rate per 100,000 population.

(b) Caution should be used in comparing these cancers due to minor classification changes between 1973 and 1993.

Source: Causes of Death

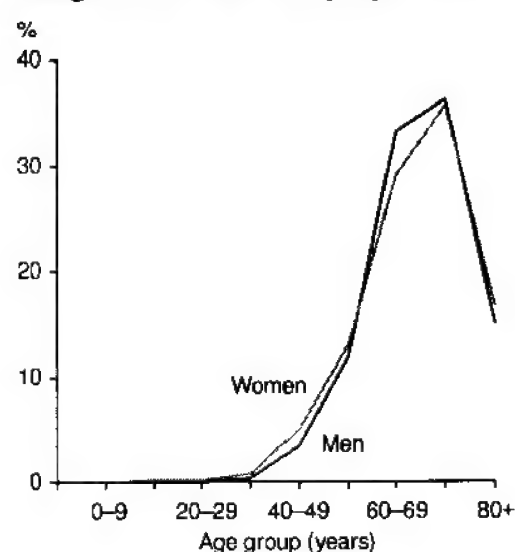
between 1973 and 1993. This decline, and the lower death rate from heart disease, could reflect changes in people's diets.

Between 1973 and 1993, age-specific cancer death rates decreased for both males and females in all age groups except for those aged 65 and over. Men had higher age-specific cancer death rates than women after the age of 50. In 1993, the age-specific cancer death rate for men aged 65 and over was nearly twice the rate observed in women. The higher cancer death rate of older men reflects the higher risk men have of developing cancer later in life than women. Men die of prostate cancer later in life, while women die of breast cancer at younger ages.

Age-specific cancer death rates

Age group (years)	1973		1993	
	Male	Female	Male	Female
	rate	rate	rate	rate
0-14	7	5	4	4
15-24	8	6	4	5
25-44	28	30	24	28
45-64	275	229	264	205
65 & over	1 300	726	1 456	833

Source: Causes of Death

Lung cancer deaths by age, 1993

Source: Causes of Death

Lung cancer

In 1993, 4,552 males and 1,828 females died of lung cancer. This accounted for 25% of all male cancer deaths and 13% of all female cancer deaths. The lung cancer death rate for men was over twice the rate for women. Lung cancer is often preventable and has been linked to lifestyle patterns such as smoking. The differences between men's and women's lung cancer death rates can be linked to differences in smoking behaviour (see Australian Social Trends 1994 pp. 60-65 *Tobacco use*).

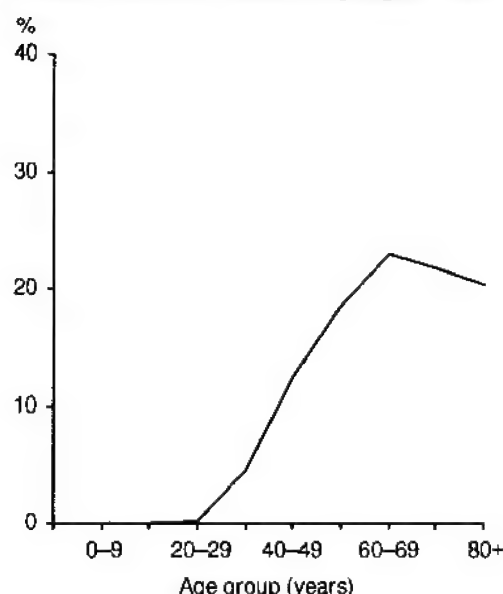
In 1993, 96% of people who died from lung cancer were over the age of 50. Half of all people who died from lung cancer were aged over 70.

Educating people about ways of preventing lung cancer, such as quitting smoking, will help to decrease the lung cancer death rate. However, there is a long lag period between changes in smoking behaviour and falling lung cancer death rates. Therefore, lung cancer is likely to remain a leading cause of death for many years².

Breast cancer

In 1993, breast cancer was the most common type of cancer death in women, accounting for 2,641 deaths. Breast cancer deaths accounted for around 1 in 5 female cancer deaths. Over one-third of all breast cancer deaths in women occurred before the age of 60. 17% occurred before the age of 50.

Breast cancer deaths by age, 1993



Source: Causes of Death

Breast cancer is a major health concern because it is more likely than other cancers to affect women at early ages. It can also be successfully treated if detected early through examination and screening procedures. Screening is currently recommended in Australia for all women aged 50-69².

Prostate cancer

In 1993, 2,544 men died of prostate cancer. Prostate cancer has been a leading contributor to the rise in cancer deaths in older men. In 1993, 97% of prostate cancer deaths occurred in men aged over 60. 80% of prostate cancer deaths occurred in men aged over 70.

The prostate cancer death rate increased between 1973 and 1993, mainly because fewer men are dying from other causes at younger ages. However, the increase may also reflect a generally low health awareness. Greater education on screening for prostate cancer is needed to reduce the growing number of prostate cancer deaths.

Colon cancer

In 1993, colon cancer was the third largest cause of cancer mortality for both men and women. In 1993, it accounted for 1,706 male deaths and 1,602 female deaths. Most men and women (94%) died of colon cancer after the age of 50.

International comparison

Australia has one of the lower cancer death rates among OECD countries but this would be partly related to Australia's comparatively younger age structure. In the United Kingdom the cancer death rates are high for both men and women mainly due to the high lung cancer death rate in that country. Japan has a much higher cancer death rate for men than for women. This may be linked to the high prevalence of smoking among Japanese men compared to Japanese women (see Australian Social Trends 1994 pp. 60-65 *Tobacco use*). Japan also has a much lower breast cancer and prostate cancer death rate than any other country.

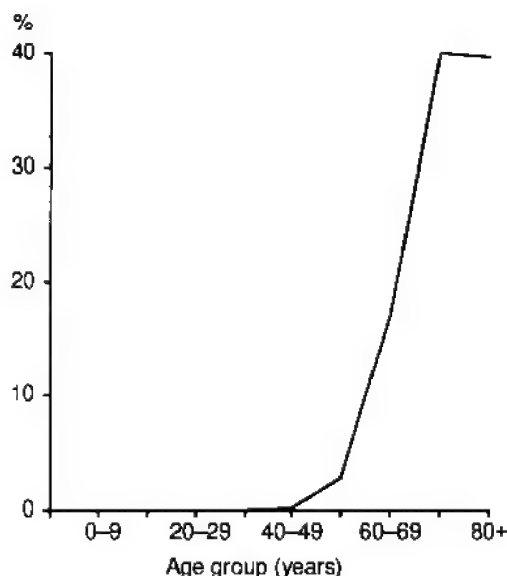
Cancer death rates^(a)

Country	Year	Men	Women
		rate	rate
Australia	1992	206.0	153.9
Canada	1991	220.5	175.5
Japan	1992	230.5	146.7
New Zealand	1991	212.8	189.9
Sweden	1990	252.6	222.8
United Kingdom	1992	300.0	262.4
United States	1990	221.3	186.0

(a) Cancer deaths per 100,000 population.

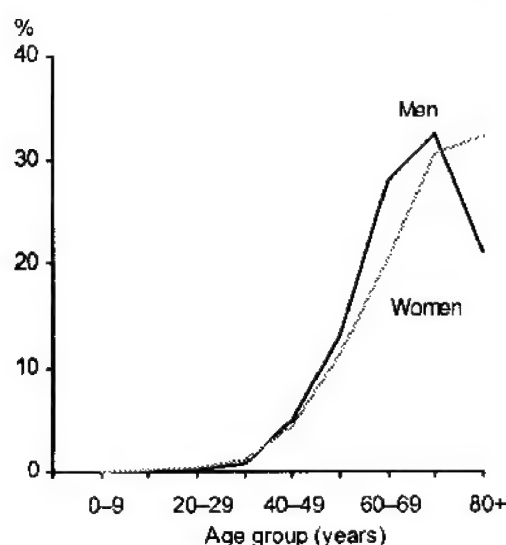
Source: World Health Organisation (1994) *World Health Statistics Annual 1993*

Prostate cancer deaths by age, 1993



Source: Causes of Death

Colon cancer deaths by age, 1993



Source: Causes of Death

Incidence of cancer

Males have a higher cancer incidence rate than females. However, between 1982 and 1988, cancer incidence rates rose more rapidly for females than males. For males, cancer incidence rates were highest for lung

Incidence rates of cancer^(a)

Type of cancer	1982 rate	1985 rate	1988 rate
Males			
Lung	54.0	52.8	46.9
Prostate	37.6	41.6	41.8
Melanoma	18.0	24.2	33.1
Colon	24.4	28.9	26.5
All cancers	288.7	305.1	301.6
Females			
Breast	55.6	59.2	62.3
Melanoma	17.6	24.0	28.3
Colon	22.0	23.6	20.8
Lung	12.5	13.7	14.2
All cancers	217.8	232.8	235.1

(a) New cases diagnosed per 100,000 population.

Source: Australian Institute of Health & Welfare *Cancer in Australia*

Cancer incidence rate

The *cancer incidence rate* is the number of new cancer cases in a particular age-sex group diagnosed during a calendar year, divided by the mid-year estimated resident population for that group. These age-sex incidence rates are applied to a standard population (in this case the WHO world standard population) to give an overall incidence rate.

cancer, followed by prostate cancer, melanoma and colon cancer. For females they were highest for breast cancer, followed by melanoma, colon cancer and lung cancer.

Between 1982 and 1988, the incidence rate for melanoma increased more rapidly than for any other type of cancer. Melanomas increased from 18 new cases diagnosed per 100,000 population for both males and females in 1982, up to 33 for males and 28 for females in 1988. This rise in incidence may be due to increased awareness, and subsequent detection, through skin cancer awareness campaigns.

The likelihood of surviving cancer can be measured by the difference between the cancer incidence rate and the cancer death rate. The difference varies between cancers. Melanomas, which rarely lead to death, have a high incidence rate and a low mortality rate. In contrast, the difference for lung cancer is smaller.

Men are more likely to develop, and die from, cancer than women. In 1988, the probability of a male being diagnosed with cancer during his lifetime was 1 in 3, compared to 1 in 4 for a female. The probability of dying from cancer was 1 in 6 for males and 1 in 9 for females³. However, these probabilities do not take into account other competing causes of death.

Endnotes

- 1 Australian Institute of Health and Welfare and the Australasian Association of Cancer Registries (1992) *Cancer in Australia, 1983-85*.
- 2 Australian Institute of Health and Welfare (1992) *Australia's Health 1992: the 3rd biennial report of the Australian Institute of Health and Welfare*.
- 3 Australian Institute of Health and Welfare unpublished data.

Related ABS publications

- ◆ Causes of Death, Australia (3303.0)

Alcohol use

RISK FACTORS

Australians now drink more light beer than ever before. The consumption of other types of alcoholic beverages has decreased since the mid 1980s.

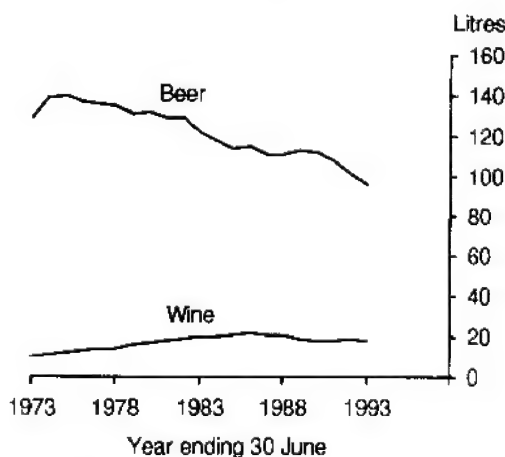
Alcohol is one of the most widely used drugs in Australia. In the February 1995 Population Survey Monitor, 57% of Australian adults (aged 18 and over) said they had consumed an alcoholic drink in the survey week. In 1992-93, a weekly average of \$15.60 per adult was spent on alcoholic drinks¹. In 1993-94 the revenue generated from government customs and excise duties on alcohol was almost \$1.5 billion².

In 1992-93, for each person over the age of 18, there were 97 litres of regular beer, 32 litres of light beer, 24 litres of wine and 2 litres of alcohol in spirits available for consumption. This is enough for every adult in Australia to consume 10 litres of pure alcohol each³.

Consumption patterns

In Australia most alcohol, both in terms of pure alcohol and volume of alcoholic beverages, is consumed as beer. However, the total consumption of beer has declined since 1974-75. Apparent consumption of low alcohol beer, which was introduced in 1978, increased from 13 litres per person in 1984-85 to 24 litres in 1992-93. Apparent per capita consumption of other beer fell over the same period, from 102 litres to 74 litres.

Apparent per capita consumption of beer^(a) and wine



(a) Includes low alcohol beer.

Source: Apparent Consumption of Foodstuffs & Nutrients

Pure alcohol

The volume of pure alcohol is calculated by applying alcohol content factors to the volume available for consumption. From 1989-90 onwards, data for beer have been compiled on the basis of excise data. Prior to this, the alcohol content of beer was calculated using 2.4% by volume for low alcohol beer and 4.8% for other beer. The alcohol content of wine is calculated using factors ranging from 10.6% by volume to 17.9%.

Apparent per capita consumption

Apparent per capita consumption is the amount available for consumption divided by the mean estimated resident population. The amount available for consumption is calculated as (commercial production + estimated home production + imports + opening stocks) minus (exports + usage for processed food + non-food usage + wastage + closing stocks).

Apparent per capita wine consumption peaked in 1985-86 at 22 litres, then declined to 18 litres in 1992-93. Apparent consumption of alcohol in spirits has remained constant at just over 1 litre per capita over the past 20 years.

Homemade beer and wine

In the 12 months to April 1992, an estimated 40 million litres of homemade beer were produced in Australia. This accounted for 2% of total beer production. During the same time an estimated 4 million litres of unfortified wine were produced at home, 1% of total wine production. Households involved in beer production made an average of 3.2 litres per week, and those involved in wine making averaged 1.6 litres per week.

People producing homemade wine were generally older than those producing homemade beer. Households where the reference person was in the 25-44 years age group produced half of all homemade beer. Households where the reference person was aged 55 and over produced just over half of all homemade wine.

People born in Italy produced the majority of homemade wine in Australia (61%). Italy was ranked fourth in the world for per capita wine

consumption. The majority of homemade beer in Australia was produced by people born in Australia, followed by UK & Ireland⁴.

Adolescent drinkers

Alcohol consumption patterns are often established during adolescence. The Anti-Cancer Council of Victoria has conducted a series of surveys measuring patterns of alcohol consumption among adolescents⁵. In 1990, 51% of boys and 46% of girls aged 17 had consumed at least one alcoholic drink in the week before the survey. Only 5% of boys and 3% of girls aged 17 had never consumed alcohol. While a much lower proportion of 12 year olds had consumed alcohol in the survey week (13% of boys and 8% of girls), less than one quarter of 12 year olds reported that they had never consumed alcohol. Across all age groups, boys consumed more alcoholic drinks per week than girls.

Like smoking, adolescent drinking is largely a social activity and peak consumption occurs on the weekends. Over one-third of adolescents reported that they consumed alcohol at home. The next most common place was at a party followed by at a friend's house. There were differences between boys and girls in the type of alcohol consumed. Boys were more likely to drink beer, while girls were more likely to drink spirits.

Almost three-quarters of adolescent drinkers reported that they obtained their last alcoholic drink from others. However, by age 17, over half of male drinkers and over two-fifths of female drinkers had purchased their last alcoholic drink themselves.

International comparison

In 1991, Australia was ranked 17th in the world, and second among English speaking countries, in terms of total alcohol consumption. Australians consumed an average of 7.7 litres of pure alcohol per head of population. In comparison, the highest per capita consumption of pure alcohol was 12.3 litres in Luxembourg. France was the highest wine consuming nation while Germany was the highest beer consuming nation. Australia was ranked 19th in wine consumption and 11th in beer consumption.

Consumption of alcoholic beverages per capita, 1991

Country	Beer litres	Wine litres	Spirits litres	Total(a) litres
Luxembourg	116.1	60.3	1.6	12.3
France	40.5	66.8	2.5	11.9
Germany	142.7	24.9	2.7	10.9
Italy	22.5	56.8	1.0	8.4
New Zealand	109.5	15.1	1.6	7.8
Australia	101.9	18.6	1.1	7.7
UK	106.2	11.5	1.6	7.4
Poland	35.0	7.4	4.5	7.1
USA	87.4	7.2	2.1	7.0
Japan	53.9	n.a.	2.0	6.3
Sweden	59.3	12.3	1.7	5.5

(a) Litres of pure alcohol. Pure alcohol refers to the amount of ethanol (ethyl alcohol) consumed.

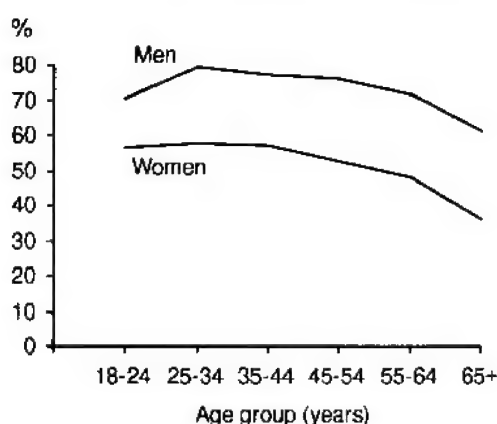
Source: World Drink Trends (1993) cited in Department of Health, Housing & Community Services *Statistics on Drug Abuse in Australia - 1994*

Adolescent alcohol consumption, 1990

Age (years)	Never drank		Current drinker (drank in last week)		Average number of drinks per week(a)	
	Boys	Girls	Boys	Girls	Boys	Girls
	%	%	%	%	no.	no.
12	22	24	13	8	3.2	2.5
13	18	17	20	17	3.7	2.5
14	11	11	28	25	4.2	3.9
15	7	6	38	34	6.1	5.1
16	6	4	44	43	8.0	5.2
17	5	3	51	46	8.9	5.7

(a) Average number of standard drinks consumed by current drinkers. Cans and bottles were converted to standard drinks. Each standard drink contains approximately 10g of alcohol.

Source: Anti-Cancer Council of Victoria

Adult current drinkers^(a), 1989-90

(a) Consumed at least one alcoholic drink in the past week.

Source: National Health Survey

Adult drinkers

More men consume alcohol than women and, on average, male drinkers consume more than female drinkers. In 1989-90, the majority of both male and female drinkers reported consuming a quantity that would put them at low alcohol risk. However, while the proportion of men consuming at medium and high risk levels decreased between 1977 and 1989-90, the proportion of women consuming at these levels increased slightly.

There were significant differences between men and women in the type of alcohol consumed. The majority of men who drank (88%) reported that they consumed beer, and almost three-quarters of these reported drinking full strength beer at least once in the

Alcohol risk level

Alcohol risk levels were derived from the average daily amount of pure alcohol consumed over the reference week. The daily consumption risk levels used are those defined by the National Health and Medical Research Council and differ for men and women.

Alcohol risk	Men	Women
Low	<50ml	<25ml
Medium	50-75ml	25-50ml
High	>75ml	>50ml

These risk levels relate to consumption on a regular basis, while data obtained from the National Health Survey relate to consumption only during the reference week and take no account of whether consumption in that week was more, less or similar to usual consumption levels. However, the majority (60%) of people reported that their alcohol consumption in the survey week was about the same as usual, with a further one-third reporting it was more than usual.

survey week. The majority of female drinkers reported drinking wine (59%) followed by spirits (35%).

The proportion people who were current drinkers peaked for those aged 25-34, and then declined with age. There were significant differences in all age groups between the proportions of men and women who were current drinkers. For example, 57% of women aged 25-34 were current drinkers in 1989-90 compared to 79% of men in the same age group.

Adult alcohol consumption

Alcohol consumption	1977			1989-90		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Did not consume	24.9	51.0	38.2	26.5	48.2	37.5
Low alcohol risk	56.9	41.9	49.3	58.6	44.3	51.4
Medium alcohol risk	9.6	5.5	7.5	7.8	5.9	6.8
High alcohol risk	8.5	1.1	4.7	7.1	1.6	4.3
Total who consumed	75.1	49.0	61.6	73.5	51.8	62.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
	'000	'000	'000	'000	'000	'000
Total persons	4 494.1	4 628.8	9 122.9	6 144.7	6 299.5	12 444.2

Source: Survey of Alcohol and Tobacco Consumption Patterns (1977); National Health Survey (1989-90)

Proportion of fatally injured drivers and motor cycle riders^(a) with an alcohol concentration of 0.05 or more^(b)

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
	%	%	%	%	%	%	%	%	%
1983	36	37	47	32	55	19	70	57	40
1988	31	38	38	42	32	31	33	16	35
1993	28	28	28	51	36	32	77	67	32

(a) Proportion of those fatally injured people who were tested for blood alcohol concentration (BAC).

(b) BAC refers to grams of alcohol per millilitre of blood. Throughout Australia, it is illegal to drive with a BAC of 0.05 or more.

Source: Federal Office of Road Safety *Road Fatalities Australia, 1993 Statistical Summary*

There is a relationship between alcohol consumption and tobacco use. People who consumed alcohol during the survey week were more likely to be current smokers than those who did not consume. Those who consumed alcohol at a high risk level were also likely to smoke a high number of cigarettes per day (see Australian Social Trends 1994 pp. 60–65 *Tobacco use*).

Alcohol related deaths

In 1992, there were approximately 6,500 alcohol related deaths. This represented 5% of all deaths. However, the death rate due to alcohol has been declining. In 1981 the alcohol related death rate was 47 per 100,000 population. By 1992, this had dropped to 38 per 100,000 population. A significant factor in this has been the decline in alcohol related road deaths. The most common alcohol related cause of death is cancer. In 1990, this accounted for approximately 32% of all alcohol related deaths⁶.

Drink driving

Alcohol is a contributing factor to motor vehicle accidents. In 1993, 91% of all fatally injured drivers and motor cycle riders were tested for their blood alcohol concentration (BAC). 32% had a BAC of 0.05 or more, down from 40% in 1983. Two-thirds of these people had a very high BAC of 0.15 or above. The small numbers of fatal road accidents in some states may result in variability in the proportions involving alcohol over time.

Alcohol may not have been the primary cause of all of these deaths. Often, there are other contributing factors such as excessive speed. Many fatal road traffic accidents in which the driver has a BAC of 0.05 or above also involve excessive speed.

In 1992, 17% of all drivers and motor cycle riders who were hospitalised after an accident had a BAC of 0.05 or above. This was a slight decrease from 19% in 1990⁷.

Endnotes

- 1 1992–93 Australian National Accounts, State Accounts (5220.0).
- 2 International Trade *unpublished data*.
- 3 Apparent Consumption of Foodstuffs & Nutrients (4315.0).
- 4 Home Production of Selected Foodstuffs, Australia, Year Ended April 1992 (7110.0).
- 5 Hill, D.J. et. al. (1993) *Tobacco and alcohol use among Australian secondary school students in 1990* Medical Journal of Australia; Vol. 158.
- 6 Department of Health, Housing & Community Services *Statistics on Drug Abuse in Australia - 1994*.
- 7 Federal Office of Road Safety (1995) *Road Crashes Resulting in Hospitalisation*.

Related ABS publications

- ◆ Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)
- ◆ National Health Survey: Alcohol Consumption (4381.0)

Education

National and state summary tables.....68

PARTICIPATION IN EDUCATION

Home-based higher education.....71

Studying from home allows easier access to higher education for those disadvantaged by distance, disability, or work and family commitments. In 1993, 11% of higher education students were studying from home.

Overseas students in higher education.....75

The number of overseas students in Australian higher education institutions has more than trebled, from 13,700 in 1983 to 42,600 in 1993.

EDUCATION AND WORK

Qualified tradespeople.....78

In 1993 there were 1.5 million qualified tradespeople, but about half were not working in their trade.

Employee training.....81

In 1993, 6.1 million employees undertook training, a 15% increase from 1989. This increase was partly due to the introduction of training guarantee legislation.

Education — national summary

PARTICIPATION		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
School students		'000	3 018	3 006	3 001	3 005	3 022	3 031	3 042	3 075	3 099	3 098	n.y.a.
TAFE students		'000	832	859	887	937	952	932	967	986	1 043	1 121	n.y.a.
Higher education students		'000	357	370	390	394	421	441	485	535	559	576	585
Year 12 apparent retention rate		%	45.0	46.4	48.7	53.1	57.6	60.3	64.0	71.3	77.1	76.6	n.y.a.
Aged 15–24 years (of all aged 15–24 years)													
Participating in any education		%	38.0	39.5	40.1	41.9	43.5	44.9	45.5	47.6	49.1	48.2	48.4
Participating in TAFE		%	8.2	8.9	8.4	8.7	9.6	9.7	9.2	9.6	9.9	9.5	8.6
Participating in higher education		%	8.3	8.0	8.0	8.8	9.2	10.8	12.0	12.7	13.7	13.1	14.9
Women aged 15–24 years participating in tertiary education (of all tertiary students aged 15–24 years)		%	n.a.	n.a.	42.4	45.1	45.7	43.9	46.4	46.6	47.2	48.2	48.9
ATTAINMENT		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Aged 15–69 years with post-school qualifications (of all aged 15–69 years)(a)		%	35.5	35.4	36.5	38.2	38.6	39.7	39.8	40.8	41.8	43.2	40.3
Degree or higher		%	7.0	7.3	7.6	7.4	7.6	8.0	8.4	8.7	9.4	9.8	11.0
Skilled vocational qualification		%	n.a.	n.a.	n.a.	13.8	13.6	13.5	13.2	13.1	13.3	13.6	14.0
Undergraduate or associate diploma		%	27.7	26.9	27.7	16.7	17.0	18.0	17.7	18.6	18.7	19.3	8.9
Basic vocational qualification		%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.4
Aged 15–69 years and did not complete highest level of secondary school (of all aged 15–69)		%	48.3	48.1	46.8	44.7	43.7	42.7	41.8	40.2	38.8	37.2	37.8
Women aged 15–69 years with post-school qualifications (of all aged 15–69 years with post-school qualifications)		%	41.8	41.9	42.1	42.1	41.8	42.9	42.2	43.1	43.5	43.6	43.6
EDUCATION AND WORK		Unit	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Unemployment rate (aged 15–69 years)													
With degree or higher		%	5.2	3.4	3.9	3.6	3.6	4.0	4.3	4.8	5.9	6.2	5.8
With skilled vocational qualification(a)		%	n.a.	n.a.	n.a.	5.0	4.8	3.6	3.6	6.6	8.7	9.6	7.7
With undergraduate or associate diploma(a)		%	7.3	5.8	5.4	6.2	6.1	5.3	5.0	7.6	9.1	10.2	7.2
With basic vocational qualification(a)		%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.4
Without post-school qualifications		%	12.6	11.7	10.9	11.5	10.0	9.2	8.8	11.5	14.2	14.8	14.6
Trainees		'000	131.9	128.6	130.4	138.9	147.1	151.7	161.0	150.1	142.9	122.4	129.9
SERVICES		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
School student/teacher ratio		no.	15.6	15.3	15.3	15.1	15.1	15.3	15.3	15.4	15.3	15.3	n.y.a.
Government schools		no.	7 544	7 561	7 589	7 575	7 535	7 513	7 490	7 470	7 448	7 366	n.y.a.
Non-government schools		no.	2 481	2 502	2 496	2 504	2 519	2 523	2 517	2 510	2 509	2 499	n.y.a.
EXPENDITURE		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Govt expenditure on education (of GDP)		%	5.5	5.4	5.4	5.2	4.9	4.7	4.7	5.0	5.2	5.3	n.y.a.
Total expenditure on education (of GDP)		%	5.8	5.8	5.8	5.7	5.4	5.2	5.2	5.5	5.8	5.8	n.y.a.

(a) A new classification of educational qualifications, *ABS Classification of Qualifications* (1262.0), was introduced in 1994. It is not strictly comparable with the previous classification. Prior to 1987 trade qualifications and certificates/diplomas were combined. Between 1987 and 1994, basic vocational qualifications were not separately identified.

Reference periods:

Schools data are at July. TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March from 1989; prior to that the reference date was 30 April. Trainees data are at 30 September from 1994; prior to that the reference date was 30 June. Expenditure data are for financial years.

Education — state summary

PARTICIPATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
School students	'000	1993	1 052.1	777.6	543.7	247.2	296.7	85.8	33.9	61.4	3 098.4
TAFE students	'000	1993	372.2	348.6	189.8	88.3	72.4	22.4	10.7	17.0	1 121.4
Higher education students(a)	'000	1994	178.0	163.9	97.0	45.0	56.4	12.1	4.4	20.2	585.4
Year 12 apparent retention rate	%	1993	70.6	79.1	82.9	86.3	75.6	60.6	47.5	94.2	76.6
Aged 15-24 years (of all aged 15-24 years)											
Participating in any education	%	1994	50.2	52.5	43.9	42.6	44.5	44.6	42.5	55.3	48.4
Participating in TAFE	%	1994	10.6	8.2	6.0	7.0	10.3	7.7	4.0	7.9	8.6
Participating in higher education	%	1994	14.1	17.4	15.1	12.1	13.0	12.3	10.5	21.0	14.9
Women aged 15-24 years participating in tertiary education (of all tertiary students aged 15-24 years)	%	1994	49.2	48.4	50.0	49.7	48.5	44.2	54.4	44.0	48.9
ATTAINMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Aged 15-69 years with post-school qualifications (of all aged 15-69 years)	%	1994	43.7	38.1	36.9	38.2	42.1	36.7	37.1	48.9	40.3
Degree or higher	%	1994	11.6	11.4	9.6	10.4	10.2	8.4	9.7	21.6	11.0
Skilled vocational qualification	%	1994	14.5	13.0	13.9	13.7	15.8	15.6	14.9	10.5	14.0
Undergraduate or associate diploma	%	1994	9.4	9.0	7.6	8.2	9.6	7.1	7.8	10.8	8.9
Basic vocational qualification	%	1994	8.2	4.7	5.8	5.9	6.6	5.6	4.6	6.1	6.4
Aged 15-69 years and did not complete highest level of secondary school (of all aged 15-69 years)	%	1994	36.0	38.9	41.4	40.5	36.4	32.5	43.3	21.7	37.8
EDUCATION AND WORK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Unemployment rate (aged 15-69 years)											
With degree or higher	%	1994	4.7	6.9	5.8	7.6	6.2	8.5	3.0	4.5	5.8
With skilled vocational qualification	%	1994	8.4	9.0	5.9	7.6	6.3	7.2	6.2	4.5	7.7
With undergraduate or associate diploma	%	1994	7.0	8.5	7.7	6.0	5.1	7.8	1.0	6.7	7.2
With basic vocational qualification	%	1994	10.2	14.0	10.8	13.2	10.8	11.7	12.4	11.2	11.4
Without post-school qualifications	%	1994	14.8	16.3	13.4	13.9	12.4	15.4	11.8	12.4	14.6
Trainees	'000	1994	44.8	30.0	26.4	9.1	12.6	3.7	1.3	2.0	129.9
SERVICES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
School student/teacher ratio	no.	1993	16.0	14.5	15.9	14.6	15.6	15.3	14.1	15.5	15.3
Government schools	no.	1993	2 184	1 934	1 326	677	766	237	146	96	7 366
Non-government schools	no.	1993	851	683	403	184	249	65	26	38	2 499

(a) State totals exclude students of the Australian Catholic University which has campuses in more than one state.

Reference periods:

Schools data are at July. TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March. Trainees data are at 30 September.

Education — definitions and references

Associate diploma — course lasting from one to two years full-time (or equivalent) for those wanting to work in advanced trades, technical, or associate professional occupations. Prior to 1994, associate diplomas were included in the category certificate/diploma.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

Basic vocational qualification — course lasting from one semester to one year full-time (or equivalent) providing practical skills and knowledge for those wanting to work at the operative level in various fields. Prior to 1994, basic vocational qualifications were included in the category certificate/diploma.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

Degree or higher — a bachelor degree (including honours), a graduate or post-graduate diploma, master's degree or a doctorate.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

Did not complete highest level of secondary school — those without post-school qualifications who did not complete the highest level of secondary schooling available at the time they left school.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

Full-time equivalent (FTE) — a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The calculation of FTE for part-time staff is based on the proportion of time worked compared to that worked by full-time staff performing similar duties.

Reference: Schools, Australia (4221.0)

GDP (gross domestic product) — the total market value of goods and services produced in Australia after deducting the cost of goods and services used up in the process of production but before deducting consumption of fixed capital.

Reference: Australian National Accounts: Concepts, Sources and Methods (5216.0)

Government expenditure on education — government final expenditure, personal benefit payments, advances to persons for HECS and other government expenditure.

Reference: Expenditure on Education, Australia (5510.0)

Government school — one administered by the Department of Education in each state/territory.

Reference: Schools, Australia (4221.0)

Higher education student — a person for whom there is a full-time, part-time or external enrolment in a course at a higher education institution at the reference date.

Reference: Participation in Education, Australia (6272.0); Department of Employment, Education and Training *Selected Higher Education Statistics*

Non-government school — one not administered by a Department of Education but including special schools administered by government authorities other than state/territory education departments.

Reference: Schools, Australia (4221.0)

Post-school qualification — any qualification gained by a person after leaving school such as a trade qualification, certificate, diploma, or degree.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

School — an educational institution which provides primary or secondary education on a full-time daily basis, or by radio or correspondence.

Reference: Schools, Australia (4221.0)

School student — a person who is enrolled in a school and active in a course of study, other than pre-school or technical and further education (TAFE) courses.

Reference: Schools, Australia (4221.0)

School student/teacher ratio — number of school students divided by full-time equivalent teachers in both primary and secondary schools.

Reference: Schools, Australia (4221.0)

Skilled vocational qualification — course lasting two to four years, and typically involving some on-the-job training, for those wanting to work in a specific vocation, recognised trade or craft that requires a high degree of skill in a range of related activities. Prior to 1994, skilled vocational qualifications referred to trade qualifications only.

Reference: Labour Force Status and Educational Attainment, Australia (6235.0)

TAFE student — a person for whom there is a full-time or part-time vocational stream enrolment in a college of technical and further education (TAFE) for the reference year.

Reference: Department of Employment, Education and Training *Selected TAFE Statistics*

Tertiary education — education provided by any institution offering post-school courses. Includes TAFE and higher education systems.

Reference: Participation in Education, Australia (6272.0)

Total expenditure on education — government expenditure on education plus private final expenditure on education.

Reference: Expenditure on Education, Australia (5510.0)

Trainees — those undertaking employment-based training under a contract of training. Prior to 1994, the number of trainees refers only to the number of apprentices. An apprentice is a person who has entered into a legal contract with an employer to serve a period of training for the purpose of attaining tradesperson's status in a recognised trade qualification.

Reference: Australian Committee on Vocational Education & Training Statistics *Australian Training Statistics 1 July to 30 September 1994*; Vocational Employment, Education and Training Advisory Committee *Apprenticeship statistics*

Undergraduate diploma — course lasting three years full-time (or equivalent) for those wanting to work as professionals or associate professionals. Prior to 1994, undergraduate diplomas were included in the category certificate/diploma.

Reference: Labour Force Status and Educational Attainment (6235.0)

Unemployment rate — the number of unemployed persons in any group expressed as a percentage of the labour force in the same group.

Reference: Participation in Education, Australia (6272.0)

Year 12 apparent retention rate — the percentage of full-time students of a given cohort group who continue from the first year of secondary schooling to Year 12.

Reference: Schools, Australia (4221.0)

Home-based higher education

PARTICIPATION

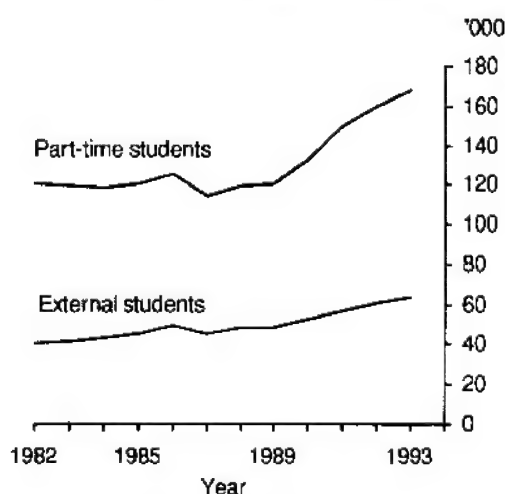
11% of higher education students in 1993 were studying from home.

Australia became one of the pioneers of home based study in 1911, when the University of Queensland became the second university in the world to make provision for external studies¹. External students do not regularly attend a campus but instead receive materials, assignments etc. at home via the mail or other information channels. In 1993, 64,000 external students enrolled in higher education courses. This represented 11% of all higher education student enrolments.

Since 1982, the number of external students has grown at a similar annual average rate to the number of part-time campus-based students (4% per year compared to 3% respectively). Between 1989 and 1993 the number of external students grew by 32% compared to 39% for part-time students. Besides external study, Open Learning Australia has recently provided a new option in home-based higher education allowing individuals to enter, without pre-requisites or quotas, a program that can lead to a degree.

External study and Open Learning Australia allow people disadvantaged by distance, disability, or work or family commitments easier access to higher education. However, external students also have to contend with some disadvantages such as difficulty in accessing the educational resources readily

External and part-time campus-based student enrolments



Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

External students

Students are classified as *external students*, regardless of student load, when all units of their study involve special delivery arrangements for materials, assignments etc. and any associated attendance at the university is of an incidental, irregular, special or voluntary nature. The general term *distance education* is sometimes used instead of external studies despite the fact that many external students live in metropolitan areas.

In this review detailed discussion of external students is limited to those who were employed.

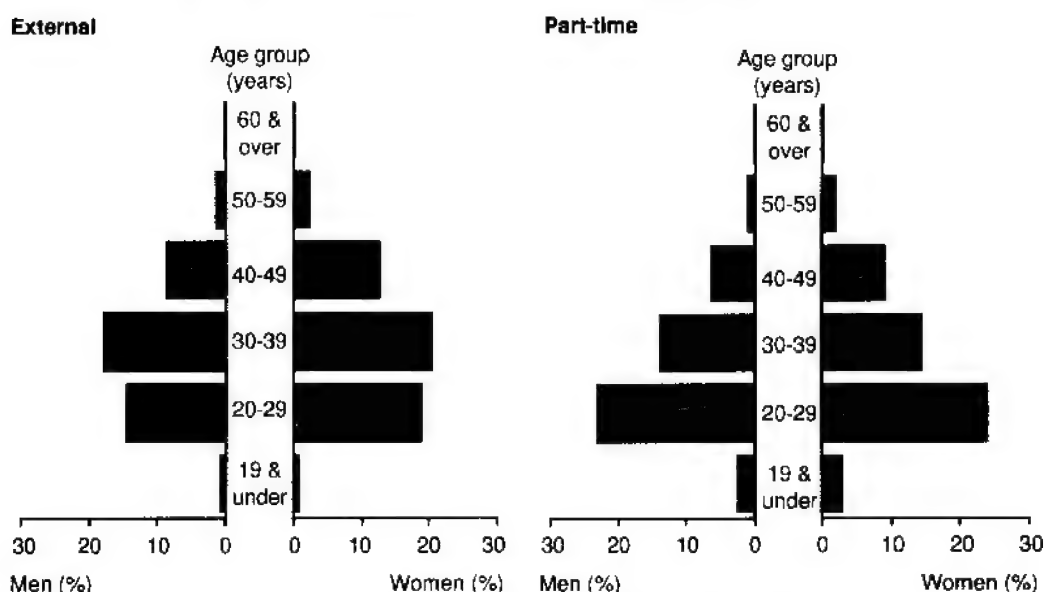
Open learning

Open learning is commonly associated with the use of television and radio as a method of presenting educational material. However, the term really relates to the accessibility of education. Institutions which offer qualifications using open learning also use traditional materials, such as text books, notes etc. *Open Learning Australia* offers degree level courses, some of which use television and radio to present part of the course material, which require no pre-requisite qualifications and can be completed from home. Open Learning Australia students are not counted as university external students. They are enrolled with the agency.

available to campus-based students. These difficulties are reduced by the provision of special services, such as audio-visual and printed study material, telephone tutorials, residential study periods and reciprocal library borrowing rights². Further, the fields of external study available are limited by the practical problems of providing external courses that require intensive laboratory work, for example, some science subjects.

In 1993 external students were, in general, older than part-time and full-time campus-based students. 83% of external students were aged 25 or more and 38% were aged 30-39. Part-time campus-based students are a mixture of young and older students with 66% aged 25 or more. The dominant age group among part-time students in 1993 was 20-29 year olds (47% of part-time students). Full-time students are mostly younger than part-time and external students. In 1993, 82% of full-time students were under 25.

External and part-time campus-based students, 1993



Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

Studying at home and working

Many students choose to study externally because of family and/or work commitments and for the convenience and flexibility of external study¹. The 1993 Survey of Training and Education targeted people in the labour force, that is, people who were employed or unemployed. Using this survey it is possible to compare the labour force characteristics of part-time campus-based students with those of external higher education students. 72% of external students in the labour force were employed full-time, 20% were employed part-time and about 7% were unemployed. The most notable difference between male and female external students was in the proportion working part-time, 31% of women

and about 6% of men. Overall the pattern of labour force status for part-time campus-based students was similar to that of external students.

Among employed external students there were more women than men while among part-time campus-based students there were slightly more men than women. 57% of employed external students were women and 48% of employed part-time students were women.

Most (79%) employed external students were members of families and most of these were a partner in a married couple (67% of employed external students). 59% of these partners had children under 15. Overall, 57% of employed

Employed external and part-time campus-based students, 1993

Family status	External students			Part-time campus based students		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Member of a family	76.1	80.4	78.6	77.6	76.5	77.1
Husband or wife	68.9	65.7	67.2	56.4	48.8	52.7
With dependent child(ren)	56.6	40.9	47.6	38.7	30.9	35.0
With child(ren) aged 0-14 years	48.0	33.1	39.5	35.3	27.9	31.8
Child of married couple	5.6*	4.2*	4.8*	19.9	18.2	19.1
Not a member of a family	23.9	19.6	21.4	22.4	23.5	22.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Survey of Training and Education

Employed external and part-time campus-based students, 1993

Selected characteristics	External students			Part-time campus-based students		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Lived in a metropolitan area	43.1	41.7	42.4	76.9	73.3	75.2
Lived elsewhere	56.9	58.3	57.6	23.1	26.7	24.8
Born in Australia	81.3	81.1	81.2	73.5	75.3	74.3
Born overseas	18.7*	18.9	18.8	26.5	24.7	25.7
Purpose of study was vocational	87.3	87.5	87.4	88.2	94.2	91.1
Purpose of study was recreational	12.7*	12.5*	12.6	11.8	5.8*	8.9
Total for each characteristic	100.0	100.0	100.0	100.0	100.0	100.0

Source: Survey of Training and Education

male external students had dependent children compared to 41% of employed female external students. 21% of employed external students were not members of a family, that is, they lived independently.

In comparison, 77% of employed part-time students were members of families, a similar proportion to employed external students, but a smaller percentage were husbands or wives (53%). 60% of these husbands and wives had children aged under 15.

58% of employed external students lived in non-metropolitan areas compared to 25% of employed part-time campus-based students. While this suggests that external studies are attractive to people not living in a metropolitan centre, there were still 42% of employed external students who lived in a metropolitan area but chose to study externally.

Employed external students mainly studied for vocational reasons. However, 13% stated that they studied for recreational reasons. In comparison, 9% of employed part-time students studied for recreational reasons.

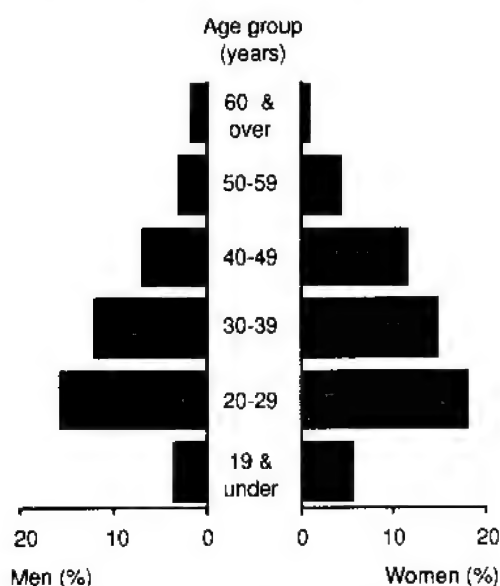
Employed external students were less likely to be overseas born than employed part-time students. 19% of employed external students and 26% of employed part-time students were overseas born.

Open Learning Australia

Open Learning Australia (OLA) evolved from the successful commonwealth funded TV Open Learning pilot project carried out in 1992. The pilot project was intended to extend access to first year degree courses by delivering them by television in conjunction with traditional education materials. Interested students could participate at three levels: simply watch the programs; purchase additional study materials as well; and finally, pay to be examined. The response to the pilot study was well beyond expectations. It was estimated that the project would attract about 500 students. However, 3,739 students purchased study materials for the first study period¹. The success of the project led to the introduction of the commonwealth funded OLA which administers courses offered by 18 provider universities². The great difference between OLA's courses and traditional enrolment at a university is that OLA requires no educational pre-requisites and the courses have no quotas.

Currently the commonwealth is funding the establishment of Open Net, an open learning electronic support service. Open Net will allow OLA students to communicate with their tutors and fellow students by electronic mail³.

In 1994, OLA enrolled a total of 8,909 individual students. Multiple enrolments (there are four study periods in a year) during the year gave a total of 21,771 course enrolments. This is nearly treble the total number of enrolments in 1993 when there

Open Learning Australia students^(a)**Related ABS publications**

- ◆ Training and Education Experience, Australia (6278.0)

(a) Based on enrolments in December 1993 and March 1994.

Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

were 8,805 course enrolments through the year. In 1994, 55% of OLA students were women and 10% of students spoke a language other than English at home⁴. 72% of students enrolled in the last study period of 1993 and the first period of 1994 were aged 25 or more.

Endnotes

- 1 Department of Employment, Education and Training (1993) *Evaluation of the First Year of the Open Learning Project, March 1992 to February 1993*.
- 2 University of New England (1994) *The Directory: Tertiary Distance Education and Open Learning Courses in Australia, 1994*.
- 3 Department of Employment, Education and Training (1994) *Directory of Commonwealth Higher Education Functions, 1994*.
- 4 Open Learning Australia *unpublished data*.

Overseas students in higher education

PARTICIPATION

The number of overseas students in Australian higher education institutions has more than trebled, from 13,700 in 1983 to 42,600 in 1993.

Australia benefits from the participation of overseas students in higher education. Benefits occur on personal, institutional and national levels. Direct benefits include the cultural enrichment of the educational environment and the revenue obtained from fees. In 1993, full fee-paying overseas students contributed \$339 million to higher education. Indirect benefits include increased expenditure in the domestic economy and the enhancement of trade relations¹.

However, there are concerns that the rising number of overseas students in Australian higher education institutions may limit access for local students². This is despite government assurances that policy changes allowing fee-paying overseas students into Australian institutions will not displace local students.

The number of overseas students attending Australian higher education institutions increased markedly over the last decade. In 1983 there were 13,700 overseas students attending Australian higher education institutions, almost 4% of all higher education enrolments. By 1993 this had more than trebled to 42,600, accounting for more than 7% of higher education enrolments. In 1993, 83% of overseas students paid full fees, compared to 6% in 1987. This increase in the number of students paying full fees reflects the government's policy changes on overseas students.

Overseas students

The Department of Employment, Education and Training (DEET) defines overseas students as foreign students who enter Australia on student visas and who attend courses on either a full-fee or subsidised basis. Overseas students include students sponsored by government and non-government agencies, and permanent residents of New Zealand who are not New Zealand citizens.

People from overseas who enter Australia on tourist visas and study non-formal courses of up to three months' duration which do not lead to an award are excluded.

While overseas students participate in all sectors of the Australian education system, this review only covers those participating in higher education.

Higher education

Higher education comprises studies leading to the award of associate diploma, diploma, associate degree, bachelor degree or higher undertaken at commonwealth funded higher education institutions, mainly universities.

The impact of fees

Before the government abolished tuition fees for higher education in 1974, most overseas students were sponsored under the Colombo Plan or other government schemes. Others were sponsored by their own governments or paid the same fees as Australian students.

Overseas higher education students

Year	Fee-paying overseas students(a)			All overseas students		
	Men	Women	Persons	Men	Women	Persons
	no.	no.	no.	no.	no.	no.
1983	n.a.	n.a.	n.a.	9 098	4 576	13 674
1985	n.a.	n.a.	n.a.	10 480	5 595	16 075
1987	678	341	1 019	10 992	6 256	17 248
1989	3 456	5 009	8 465	15 296	10 151	25 447
1991	13 377	10 155	23 532	19 438	14 970	34 408
1993	19 980	15 302	35 282	23 521	19 050	42 571

(a) Separate data on fee-paying overseas students were not collected until 1987.

Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

From 1974 until the early 1980s, overseas students enrolled on the same basis as Australian students, ie there were no fees for tuition. In 1986 the government introduced full fees for overseas students. Some students, however, were fully sponsored by the Australian International Development Assistance Bureau (AIDAB), and others were privately subsidised, meeting some of the cost of their tuition via an overseas student charge. From 1990 all overseas students were admitted on a full fee-paying basis².

In 1993 fees varied according to the field of study and level of course. The median annual costs were \$15,000 for a doctorate or higher, \$12,000 for a master's and other graduate studies and \$10,000 for a bachelor's degree.

Choice of courses

In 1993, 76% of overseas students were studying at undergraduate level and 97% of them were undertaking a bachelor's pass degree. Of those students studying at postgraduate level, 30% were undertaking doctorates or higher, 49% master's degrees, and 21% other postgraduate studies.

Business, administration and economics was the most popular field of study for both men and women at undergraduate and postgraduate levels. Other popular fields of

study for women at postgraduate level were arts, humanities and the social sciences and science and for men were science and engineering.

The second most popular field of study for undergraduate females was arts, humanities and the social sciences, while for undergraduate males it was science. The different course choices between men and women were similar to those of Australian students.

Location of students

In 1993, 59% of all overseas higher education students were enrolled in either Victorian or New South Wales institutions. This was much the same as the proportion of all higher education students enrolled in these two states. Victoria had the most overseas higher education students, with 32% of all enrolments, compared to 28% of all higher education students enrolled in Victoria. Western Australia had the greatest difference between the proportions of overseas students and total students enrolled in its institutions, 14% compared to 10%.

Victoria's Monash University had the most fee-paying overseas students (4,120), accounting for 12% of all overseas fee-paying students. This was followed by the University

Overseas students' fields of study, 1993

Field of study	Undergraduate		Postgraduate	
	Men	Women	Men	Women
	%	%	%	%
Agriculture, animal husbandry	1.0	0.6	5.4	4.3
Architecture, building	3.3	1.6	3.3	1.9
Arts, humanities and social sciences	7.5	16.9	12.2	20.7
Business, administration, economics	44.0	47.2	24.9	21.5
Education	1.3	4.0	5.5	13.5
Engineering, surveying	17.2	2.9	17.6	4.7
Health	6.0	13.5	5.8	13.3
Law, legal studies	1.5	1.7	1.4	1.3
Science	18.1	11.5	22.9	18.4
Veterinary science	0.1	0.1	1.0	0.7
Total(a)	100.0	100.0	100.0	100.0
	no.	no.	no.	no.
Total(a)	16 499	15 039	6 546	3 504

(a) Excludes non-award courses.

Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

Higher education students, 1993

State	Overseas	Total
	%	%
Victoria	31.8	28.1
New South Wales	27.5	30.3
Western Australia	14.0	9.6
Queensland	13.8	16.3
South Australia	5.9	7.7
Australian Capital Territory	4.2	3.6
Tasmania	1.9	2.1
Northern Territory	0.5	0.7
Australian Catholic University(a)	0.4	1.5
Total	100.0	100.0
	'000	'000
Total	42.6	575.6

(a) Australian Catholic University has campuses in more than one state.

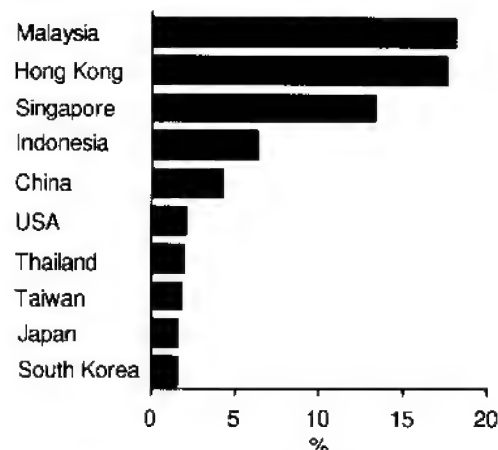
Source: Department of Employment, Education, and Training *Selected Higher Education Statistics*

of New South Wales (3,090), the Royal Melbourne Institute of Technology (2,945), and Curtin University of Technology in Western Australia (2,412).

Source countries of overseas students

In 1993, the top three source countries for overseas students were Malaysia, Hong Kong and Singapore, accounting for 49% of the total overseas student population. The top ten source countries together contributed 69% of the total number of overseas students.

Monash University and the University of New South Wales attracted the highest number of

Top ten source countries^(a) for overseas students, 1993

(a) Students' country of permanent home residence.

Source: Department of Employment, Education and Training *Selected Higher Education Statistics*

students from Hong Kong. Monash University, the Royal Melbourne Institute of Technology and Curtin University attracted the highest number of students from Malaysia, and the Royal Melbourne Institute of Technology and Curtin University attracted the highest number from Singapore³.

Endnotes

- 1 Harris, G. and Jarrett, F. (1990) *Educating overseas students in Australia: who benefits?* Allen and Unwin.
- 2 Dobson, I. (1993) *Trends in enrolments of overseas students in higher education* People and Place Vol. 1, No. 2.
- 3 Department of Employment, Education and Training (1994) *Overseas Student Statistics, 1993*.

Qualified tradespeople

EDUCATION AND WORK

In 1993 there were 1.5 million qualified tradespeople, but about half were not working in their trade.

The range and levels of skills of the Australian labour force have come under increasing scrutiny as the Australian economy undergoes structural readjustment. In recognition of this the government has sought to implement policies to make Australian manufacturing and service industries more internationally competitive¹.

Structural change has an impact on the range and level of skills required of the labour force in the short-term. Future education and training systems aim to develop a skills base to match the new labour market needs (see *Employee training* pp. 81-84).

Stock of tradespeople

In August 1993 almost 1.2 million people were employed as tradespersons, 15% of all employed people. This was a slight reduction from August 1989 when 16% of employed people were tradespersons. In contrast, the proportions employed as managers and administrators, professionals, and salespersons and personal service workers increased².

In 1993, 1.5 million people held recognised trades qualifications, an increase of 13% from 1.3 million in 1989. Between 1989 and 1993, the number of people qualified in building trades increased by 49,400 (17%) and in metal fitting and machining by 35,600 (16%). Proportionally, the greatest increase, 22%, was

Qualified tradespeople

Qualified tradespeople are people aged 15-64 who hold a trade certificate following the completion of a four-year Australian apprenticeship, or who have a trade qualification or experience recognised in Australia either under the Tradesman's Rights Regulation Act or by a State Apprenticeship and Training Authority.

in the number of people qualified in hairdressing.

Unused skills

When qualified tradespeople do not work in their trade, skills wastage may occur. This may come about voluntarily or involuntarily. Involuntary skills wastage occurs as current skills are made redundant or the need for such skills is reduced, for example, due to technological change. It may also result from a lack of demand in the labour market for such skills.

In 1993, 51% of qualified tradespeople were not working in their trade, compared to 46% in 1989. Of those not working in their trade, 19% were not in the labour force, 14% were unemployed and 67% were employed. Of the latter group, 53% still used their trade skills occasionally in their job, with over half using their trade skills at least once a week. 6% of qualified tradespeople in the labour force had never worked in their trade.

People qualified in the building trade were the most likely to be working in their trade (61%) while those qualified in hairdressing were the least likely (36%). 27% of qualified hairdressers were not in the labour force, reflecting the high proportion of women in this field.

The proportion of tradespeople not working in their trade increased as their age increased, from 31% of those aged 15-24, to 75% of those aged 55-64. In this latter age group, 42% of people not working in their trade were employed in another occupation and 41% were not in the labour force and had no interest in working. The remainder were either unemployed or not in the labour force but still interested in working.

Qualified tradespeople

Field of trade qualification	1989 '000	1993 '000
Metal fitting and machining	215.9	251.5
Other metal	88.6	89.2
Electrical and electronics	216.2	230.9
Building	289.5	338.9
Vehicle	188.9	207.5
Food	81.8	91.0
Hairdressing	77.9	95.2
Other(a)	184.8	216.0
Total	1 343.7	1 520.2

(a) Includes printing and other trades.

Source: Survey of Career Paths of Persons with Trade Qualifications

Use of trade qualifications, 1993

Field of trade qualification	Not in the labour force	Unemployed	Employed		Total
			Not in trade	In trade	
	'000	'000	'000	'000	'000
Metal fitting and machining	24.4	16.6	101.0	109.4	251.5
Other metal	10.1	5.8*	32.3	41.0	89.2
Electrical and electronics	15.3	12.1	82.6	121.0	230.9
Building	24.5	23.6	84.0	206.8	338.9
Vehicle	15.7	14.7	76.4	100.7	207.5
Food	5.2*	8.7	34.8	42.4	91.0
Hairdressing	25.6	9.5	26.0	34.1	95.2
Other(a)	29.4	14.5	85.8	86.3	216.0
Total	150.1	105.6	522.9	741.6	1 520.2

(a) Includes printing and other trades.

Source: Survey of Career Paths of Persons with Trade Qualifications

Reasons for leaving trade

In 1993, 681,400 qualified tradespeople who had ever worked in their trade were no longer working in their trade. The most common reasons given were that they had been laid off, or that there had been a lack of work (21%). This was followed by wanting a change or dissatisfaction with the job (21%), family/personal/ill health reasons (20%) and reasons relating to seeking better pay/career prospects (19%). In contrast the most common reason reported for leaving a trade in 1989 was that respondents wanted a

change or were dissatisfied with their jobs (32%).

Reasons given differed according to field of trade and the length of time spent in it. In 1993, tradespeople with less than 2 years experience were most likely to have reported being laid off or lack of work as the reason for leaving. Tradespeople with between 2 and 10 years experience were most likely to have given reasons of seeking better pay/career prospects, or wanting a change/dissatisfied with job.

Qualified tradespeople who had left their trade, 1993

Reason for leaving	Time worked in trade				Total
	Under 2 years	2 to under 5 years	5 to under 10 years	10 years and over	
	%	%	%	%	%
Laid off or lack of work	28.2	16.5	17.2	25.1	21.4
Wanted a change or dissatisfied with job	21.7	21.3	24.8	17.0	20.8
Family, personal or ill health	12.8	18.6	18.5	26.2	20.4
Sought better pay, lack of career prospects or promoted	17.0	26.6	22.5	12.7	19.3
More job security or sought better physical working conditions	9.2	9.6	8.0	6.5	8.0
Other	11.1	7.3	9.0	12.4	10.1
Total	100.0	100.0	100.0	100.0	100.0
	'000	'000	'000	'000	'000
Total	100.7	170.1	174.5	236.1	681.4

Source: Survey of Career Paths of Persons with Trade Qualifications

Usual average weekly earnings of tradespeople employed full-time

Field of trade	1989			1993		
	Working in trade	Not working in trade	Ratio(a)	Working in trade	Not working in trade	Ratio(a)
	\$	\$	ratio	\$	\$	ratio
Metal fitting and machining	539	604	0.89	601	635	0.95
Other metal	492	494	0.99	618	624	0.99
Electrical and electronics	581	609	0.95	660	710	0.93
Building	514	541	0.95	565	648	0.87
Vehicle	461	507	0.91	511	596	0.86
Food	447	505	0.89	543	620	0.88
Hairdressing	339*	370*	0.92	442	454*	0.97
Other(b)	502	539	0.93	611	791	0.77
Total	513	547	0.94	588	663	0.89

(a) Ratio of the earnings of those working in their trade to the earnings of those not working in their trade.

(b) Includes printing and other trades.

Source: Survey of Career Paths of Persons With Trade Qualifications

Hairdressing had a high proportion of female tradespeople. The most common reason for leaving the trade given by this group was family/personal/ill health.

Earnings of tradespeople employed full-time

Although seeking better pay was not the most common reason reported for leaving a trade, or for not working in the trade, it does appear to be a factor influencing qualified tradespeople to take up other occupations. In both 1989 and 1993, in all fields, those qualified tradespeople who were employed full-time but not working in their trade had, on average, higher usual weekly earnings than those working in their trade. Among those qualified in the metal fitting and machining, other metal, electrical and electronics, and hairdressing fields, average usual full-time earnings in 1993 differed by 8% or less between those working in their trade and those not working in their trade. In all other trades average usual full-time earnings differed by more than 10%.

Earnings generally increase with age and those working outside their trade tend, on average, to be older than those still working in their trade. This will also be a factor in the earnings difference.

Between 1989 and 1993, the usual average weekly full-time earnings of qualified tradespeople working in their trade increased

by 15%, compared to an increase of 21% for those not working in their trade.

Tradespeople are more likely than any other occupation group, except managers and administrators, to be employers or self-employed. In August 1993, 25% of employed tradespeople were employers or self-employed compared to 45% of managers and administrators and less than 20% of other occupation groups².

Among employees, average earnings of tradespeople increased at a lesser rate than that of all employees between 1989 and 1993. This may be due to changes in pay rates, but is also a result of faster employment growth in higher paying occupations than tradespersons. In 1989, 38% of full-time employees belonged to occupation groups with higher mean earnings than tradespeople, compared to 41% in 1993³.

Endnotes

- 1 Thomas, C. (1988) *Separation from the Trades — An analysis of 1981 Census data of major trades* Department of Employment, Education and Training, Economic Division, Discussion paper No 2.
- 2 The Labour Force, Australia (6203.0).
- 3 Weekly Earnings of Employees (Distribution), Australia (6310.0).

Related ABS publications

- ◆ Career Paths of Persons with Trade Qualifications, Australia (6243.0)

Employee training

EDUCATION AND WORK

In 1993, 6.1 million employees undertook training, a 15% increase from 1989. This increase was partly due to the introduction of training guarantee legislation.

Over the last decade there has been a growing emphasis on education and training in most OECD countries, including Australia. The government has recognised that increasing the range of skills in the labour force, particularly in the areas of high technology, will promote economic growth and improve Australia's international competitiveness.

The government has therefore promoted education and training in several ways. These include: the introduction of the Training Guarantee legislation (TG); the establishment of the National Training Board which is responsible for the development and implementation of a national competency-based training system; the establishment of the Australian National Training Authority (ANTA) which is responsible for TAFE and Skills Centres funding; and the release of *Working Nation*, the White Paper on Employment and Growth, which includes details of a number of new

Employees who undertook training

Type of Training	1989	1993
	%	%
Some training undertaken	79.0	85.8
Study or training course undertaken	47.8	47.0
Studied in previous year	16.8	18.6
In-house training	34.9	31.3
External training	9.8	11.8
Employer supported	6.4	7.3
Not employer supported(a)	3.4	4.5
On-the-job training	71.8	81.8
No training undertaken	21.0	14.2
Total(b)	100.0	100.0
	'000	'000
Total employees	6 704.7	7 078.7

(a) Includes people who attended external training courses while not working.

(b) Totals may not add to 100% because employees may have participated in more than one type of training.

Source: Survey of How Workers Get Their Training (1989); Survey of Training and Education (1993)

Training

Training refers to activities which develop or maintain skills related to job performance and/or competency. Training includes formal instruction and on-the-job training.

External training courses are those which are organised and conducted by training or educational establishments, agencies or consultants other than a person's employer or business. They include TAFE courses and university studies.

In-house training courses are those organised by a person's employer or business primarily for their own staff and using the employers' or business' staff or training consultants.

On-the-job training involves activities such as being shown how to do the job, watching others work, asking questions of co-workers and teaching oneself.

Small employers are organisations with between 1 and 19 employees. *Medium employers* are organisations with between 20 and 99 employees. *Large employers* are organisations with 100 or more employees.

Training Guarantee legislation

In July 1990, the government introduced the *Training Guarantee legislation (TG)*. The TG required employers with a set minimum annual national payroll (\$226,000 in 1993-94) to spend a minimum proportion of their payroll (1.5% in 1993-94) on training. Those who spent less had to pay the shortfall in taxation. In July 1994, the TG was suspended for two years because of the demonstrated commitment by industry to meet its training obligations over the past few years, and in the light of the government's commitment to training reform outlined in *Working Nation*, the White Paper on Employment and Growth.

training programs and modifications to existing programs.

Employee training

In 1993, 86% of all employees undertook some form of training, up from 79% in 1989. This increase was partly due to the introduction of the TG and most of it occurred in on-the-job training. On-the-job training was also the most common form of training, undertaken by 82% of employees in 1993 and 72% in 1989. In both years, almost

half of all employees undertook study or a training course, mostly in-house training. There was an increase in the proportion of employees undertaking employer supported external training.

Each employee spent, on average, 5.6 hours on training between July and September 1993. This was down from 5.9 hours during the same period in 1990¹. This may have been due to increasing costs associated with training or differences in the types of training undertaken.

Training expenditure¹

Between July and September 1993, employers spent \$1.1 billion on employee training, an average of \$192 per employee. This represented 3% of gross wages and salaries, well above the 1.5% required by the TG legislation.

A greater proportion of medium and large employers than small employers spent money on training. This was mainly because many small employers have an annual payroll below the TG minimum and, therefore, are out of the scope of the legislation. Three-quarters of employers in the scope of the TG legislation spent some money on training, accounting for 96% of all money spent on training. Of employers below the TG threshold, 13% spent money on training.

Employee training by industry

The amount of training an employee received varied according to the industry they worked in. Training provided in an industry is affected by a number of factors. These include the average size of organisations operating within that industry, the extent of technological and structural change taking place, and the mix of private and public organisations in the industry.

In 1993, 91% of employees in mining; electricity, gas and water; and community services undertook training. This was followed by public administration and defence (90%). Employees in the manufacturing industry were the least likely to have undertaken training (80%).

Training expenditure also varied according to industry. The communication and mining industries spent the greatest proportion of their gross wages and salaries (5%) on employee training. The construction and

Training undertaken by industry, 1993

Industry	Employees(a)	Average spent(b)
	%	%
Mining	91.2	5.1
Electricity, gas and water	90.7	4.4
Community services	90.7	2.9
Public administration and defence	90.0	3.2
Finance, property, business services	89.2	3.2
Communication	86.6	5.4
Construction	84.8	1.8
Wholesale and retail trade	84.4	2.4
Recreation, personal & other services	82.1	1.9
Transport and storage	81.8	2.7
Manufacturing	80.1	2.6
Total	85.8	2.9

(a) Proportion of employees who undertook some form of training.

(b) Proportion of gross wages and salaries spent on training.

Source: Survey of Training and Education; Training Expenditure Survey

recreation, personal and other services industries spent the least, less than 2%.

In-house training

In 1993, 2.2 million employees took in-house training courses, a fall of 5% from 1989. The most common type of training courses were in the management and professional field. 30% of employees reported that the main type of course they attended was in this field. This was followed by technical and para-professional courses (13%) and sales and personal service courses (12%). Attendance at courses in each of these fields increased between 1989 and 1993.

Large employers were more likely to offer in-house training programs than small employers. In 1993, less than 1% of the gross wages and salaries of small employers was spent on in-house training. Large employers spent nearly three times as much.

Field of main training course attended by employees

Field of training	In-house		External	
	1989	1993	1989	1993
	%	%	%	%
Management and professional	26.4	30.1	31.5	30.7
Technical and para-professional	9.9	12.9	10.4	10.8
Trade/craft	4.3	6.2	9.3	8.1
Clerical/office	7.5	5.1	6.1	4.2
Sales and personal service	10.7	11.6	8.5	9.4
Induction	4.3	3.4	(b)	(b)
General supervisory	4.6	3.2	(b)	(b)
General computing	10.4	9.5	12.8	13.5
General health and safety	10.8	7.0	5.8	5.1
Other courses(a)	11.0	11.1	15.6	18.2
Total	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total employees who attended a training course	2 337.5	2 214.2	658.4	835.6

(a) Includes transport and machinery operation, labouring and related, English language, literacy, numeracy, music, arts and other training courses.

(b) Included in other fields.

Source: Survey of How Workers Get Their Training (1989); Survey of Training and Education (1993)

External training courses

In 1993, 836,000 employees attended external training courses, a 27% increase from 1989. 31% of employees reported that the main type of external training course they attended was in the management and professional field.

Courses in computing (14%) and courses in the technical and para-professional field (11%) were also commonly attended. Only 4% of employees attended external courses in the clerical or office field.

Reasons employers provided training(a), 1994

Reasons for training	Small employers	Medium employers	Large employers	Total
	%	%	%	%
Improve work performance of employees	75.6	87.2	95.8	79.8
Enable movement to other positions within organisation(b)	35.2	47.9	68.5	40.6
Multi-skill employees	32.9	51.2	69.3	39.9
Meet Training Guarantee requirements	23.8	46.0	30.7	29.5
	'000	'000	'000	'000
Employers who provided training	61.3	20.9	6.5	88.8
Employers who did not provide training	188.5	1.8	**	190.4

(a) Refers to training during the 12 months ending February 1994. Percentages do not add to total because employers may have had more than one reason for providing employee training.

(b) Includes employees being trained to move to more highly skilled or responsible positions within the organisation, or to fill identified vacant positions from within the organisation.

Source: Training Practices Survey

Reasons for employees undertaking training^(a), 1993

Reasons for training	In-house training	External training	Total
	%	%	%
Retraining to do different duties in the same job	35.9	37.4	36.2
Necessary to obtain a promotion	21.4	8.6	18.2
To help in obtaining a promotion	16.6	11.9	15.4
Retraining to get a different job with the same employer	13.1	12.9	13.0
Retraining to change employers	7.3	14.7	9.1

(a) Percentages do not add to 100% because employees may have had more than one reason for undertaking training.

Source: Survey of Training and Education

Reasons employers provided training

In 1994, 32% of employers provided training for their employees during the previous 12 months. The most commonly reported reason was to improve employees' work performance (80%). 99% of large employers provided training compared to 92% of medium employers and 25% of small employers. For all of them, the most commonly reported reason was to improve the work performance of employees.

Meeting the requirements of the TG legislation was reported as a reason for training by 30% of employers overall and by 46% of medium employers. More than half (57%) of the employers above the TG threshold reported that the introduction of the TG in 1990 had resulted in increased expenditure on training for their employees. 6% of employers above the TG threshold who provided training reported that the TG legislation was their only reason for training expenditure.

Reasons employees undertook training

In 1993, retraining to do different duties in the same job was the most common reason employees undertook training (36%). Other reasons for retraining included retraining to get a different job with the same employer (13%) and retraining to change employers (9%).

One-third of employees undertook training to increase their chances of promotion; just over half of them undertook training courses because they saw it as necessary to obtain a promotion while the rest saw it as helpful in obtaining a promotion.

Retraining to do different duties in the same job was the most common reason for both in-house and external training. However, in-house training was more commonly undertaken than external training for promotion reasons. Retraining to change employers was more common among people who undertook external training than among those who did in-house training.

Endnotes

- 1 Employer Training Expenditure (6353.0).

Related ABS publications

- ◆ Training and Education Experience, Australia (6278.0)
- ◆ Employer Training Practices, Australia (6356.0)
- ◆ Employer Training Expenditure, Australia (6353.0)

Work

National and state summary tables.....86

LABOUR FORCE PROJECTIONS

Projections of the labour force.....89

Australia's labour force is projected to grow from 8.6 million people in 1993 to 10.6 million in 2011, largely because of increased participation by women.

PAID EMPLOYMENT

The working week.....91

Average weekly hours worked by full-time workers have been increasing. This is mainly because more people are working more hours without additional pay.

Home workers.....94

Between 1989 and 1992 the number of home workers increased by 15% to 308,000. An increase occurred in most industries and occupations. Twice as many women as men were home workers.

UNEMPLOYMENT

Youth unemployment.....98

Youth unemployment is of particular concern to young people who are not in full-time education and who are often looking for their first job. In 1994 over 300,000 people aged 15–24 were unemployed.

Work — national summary

LABOUR FORCE	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total labour force	'000	7 068	7 199	7 451	7 679	7 867	8 083	8 346	8 491	8 518	8 574	8 696
Participation rate	%	60.5	60.5	61.4	62.0	62.2	62.6	63.5	63.6	63.0	62.6	62.8
Male participation rate	%	76.5	75.9	75.9	75.6	75.3	75.2	75.5	75.4	74.4	73.9	73.6
Female participation rate	%	45.0	45.7	47.4	48.7	49.4	50.4	51.9	52.3	51.9	51.7	52.2
Women (of labour force)	%	37.7	38.3	39.1	39.8	40.3	40.8	41.4	41.7	41.9	41.9	42.3
PAID EMPLOYMENT	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total employed	'000	6 388	6 579	6 860	7 044	7 256	7 549	7 832	7 782	7 637	7 634	7 781
Part-time employed (of total employed)	%	17.3	17.7	18.3	19.2	19.8	20.1	20.9	21.7	22.9	23.5	23.8
Employment/population ratio	%	54.7	55.3	56.6	56.9	57.4	58.5	59.6	58.3	56.5	55.8	56.2
Employed in service industries (of employed)	%	23.5	24.0	23.9	24.5	24.6	24.8	24.9	25.6	27.1	27.1	27.2
Employed in manufacturing industries (of employed)	%	17.8	17.5	16.7	16.2	16.2	16.1	15.5	14.9	14.4	14.5	14.2
Part-time employed who want more hours (of part-time employed)	%	19.4	17.7	16.9	18.4	18.8	17.6	18.0	21.7	26.4	29.2	28.3
Average hours worked per week by full-time workers	hours	38.7	38.8	39.1	39.7	39.7	39.7	39.8	39.9	40.6	40.3	40.7
Average weekly hours of paid overtime per employee	hours	1.1	1.2	1.2	1.3	1.4	1.5	1.3	1.1	1.1	1.2	1.3
INDUSTRIAL RELATIONS	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Trade union membership rate	%	n.a.	n.a.	45.6	n.a.	41.6	n.a.	40.5	n.a.	39.6	n.a.	35.0
Working days lost due to industrial disputes per 1,000 employees	days	248	228	242	223	269	190	217	265	158	108	86
UNEMPLOYMENT	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total unemployed	'000	680.1	619.4	591.5	635.1	610.5	534.6	513.7	709.0	881.7	940.5	915.5
Long-term unemployed	'000	202.7	192.5	172.1	176.8	169.1	145.6	116.4	149.5	255.7	336.3	334.8
Unemployment rate	%	9.6	8.6	7.9	8.3	7.8	6.6	6.2	8.4	10.4	11.0	10.5
Youth unemployment rate	%	23.3	21.3	19.9	20.3	18.9	15.7	14.9	20.0	23.8	24.5	23.8
Youth unemployment/population ratio	%	14.1	12.8	12.1	12.3	11.2	9.4	9.1	11.7	13.3	13.5	13.3
Median duration of unemployment	weeks	22.9	21.6	19.9	18.9	18.1	16.4	12.7	14.4	23.8	27.8	27.5
NOT IN LABOUR FORCE	Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Discouraged jobseekers	'000	93.7	83.0	83.6	94.4	83.8	76.1	100.9	138.2	145.6	147.4	106.5

Reference periods:

All data are annual averages for the year ending 30th June except for average weekly hours of paid overtime per employee, trade unionisation rate, working days lost due to industrial disputes per 1,000 employees, and discouraged jobseekers.

Work — state summary

LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total labour force	'000	1993-94	2 903.8	2 206.9	1 553.6	712.6	853.5	220.2	80.8	164.7	8 696.0
Participation rate	%	1993-94	61.5	62.8	63.7	61.3	65.5	60.3	67.4	72.8	62.8
Male participation rate	%	1993-94	72.3	73.9	74.8	71.7	77.0	71.5	73.8	80.4	73.6
Female participation rate	%	1993-94	51.2	52.1	52.8	51.2	54.1	49.4	60.6	65.6	52.2
Women (of labour force)	%	1993-94	42.3	42.4	41.9	42.6	41.5	41.7	43.6	46.0	42.3
PAID EMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total employed	'000	1993-94	2 603.7	1 946.3	1 396.1	635.4	777.9	193.7	74.9	152.6	7 780.6
Part-time employed (of total employed)	%	1993-94	22.5	24.0	23.8	26.3	25.2	26.8	19.8	23.7	23.8
Employment/population ratio	%	1993-94	55.2	55.3	57.2	54.7	59.7	53.0	62.5	67.5	56.2
Employed in service industries (of employed)	%	1993-94	26.9	25.3	27.2	30.3	27.5	29.4	35.5	34.0	27.2
Employed in manufacturing industries (of employed)	%	1993-94	14.7	17.5	12.3	15.1	10.5	12.4	5.1	3.2	14.2
Part-time employed who want more hours (of part-time employed)	%	1993-94	26.4	29.0	30.2	31.2	25.9	30.1	32.0	26.6	28.3
Average hours worked per week by full-time workers	hours	1993-94	40.5	40.6	41.1	40.9	41.3	39.1	40.6	38.4	40.7
Average weekly hours of paid overtime per employee	hours	1994	1.3	1.4	1.2	1.1	1.5	1.0	1.5	0.7	1.3
INDUSTRIAL RELATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Trade union membership rate	%	1994	35.6	34.7	34.3	41.4	27.9	42.9	29.7	36.7	35.0
Working days lost due to industrial disputes per 1,000 employees	days	1994	113	58	135	38	51	32	125	8	86
UNEMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total unemployed	'000	1993-94	300.1	260.5	157.6	77.2	75.6	26.5	5.9	12.1	915.5
Long-term unemployed	'000	1993-94	114.5	104.9	46.8	30.3	22.7	11.1	1.4	3.1	334.8
Unemployment rate	%	1993-94	10.3	11.8	10.1	10.8	8.9	12.0	7.3	7.3	10.5
Youth unemployment rate	%	1993-94	22.5	26.4	23.0	28.3	20.5	26.0	19.7	22.0	23.8
Youth unemployment/population ratio	%	1993-94	12.1	13.8	14.1	15.3	12.8	14.8	8.8	13.1	13.3
Median duration of unemployment	weeks	1993-94	28.9	31.3	21.4	30.8	20.3	33.3	15.3	18.0	27.5
NOT IN LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Discouraged jobseekers	'000	1994	36.4	31.1	18.8	7.5	6.4	4.3	*1.2	*0.8	106.5

Reference periods:

All data are annual averages for the year ending 30th June except for average weekly hours of paid overtime per employee, trade unionisation rate, working days lost due to industrial disputes per 1,000 employees, and discouraged jobseekers.

Work — definitions and references

Average hours worked per week by full-time

workers — average hours worked, including overtime, by full-time workers during the survey reference week. The hours are those stated by survey respondents and are not necessarily the hours paid for.

Reference: The Labour Force, Australia (6203.0)

Average weekly hours paid overtime per employee —

total overtime hours paid for divided by the total number of employees, including those who were not paid for any overtime. Overtime is time worked in excess of award, standard or agreed hours of work for which payment is received. Figures are the annual average of quarterly figures.

Reference: Job Vacancies and Overtime, Australia (6354.0)

Discouraged jobseekers — people who wanted to work and who were available to start work within four weeks but whose main reason for not taking active steps to find work was that they believed they would not be able to find a job for reasons of: age; language or ethnicity; schooling; training; skills or experience; no jobs in their locality or line of work; or they considered that there were no jobs at all available.

Reference: Persons Not in the Labour Force, Australia (6220.0)

Employed — persons aged 15 years and over who worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

Reference: The Labour Force, Australia (6203.0)

Employees — employed persons who worked for wages or salary in the reference period.

Reference: The Labour Force, Australia (6203.0)

Employment/population ratio — the number of employed persons in a group expressed as a proportion of the civilian population in the same group.

Reference: The Labour Force, Australia (6203.0)

Full-time workers — employed persons who usually worked 35 hours a week or more and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Reference: The Labour Force, Australia (6203.0)

Labour force — all persons aged 15 years and over who, during the reference week, were employed or unemployed.

Reference: The Labour Force, Australia (6203.0)

Long-term unemployed — people unemployed for 52 weeks or longer.

Reference: The Labour Force, Australia (6203.0)

Manufacturing industries — the manufacturing division of the *Australia and New Zealand Standard Industrial Classification* (1292.0). Prior to 1985 the manufacturing division of the *Australian Standard Industrial Classification* (1201.0) was used.

Reference: The Labour Force, Australia (6203.0)

Median duration of unemployment — the period of unemployment at which half of the unemployed had been unemployed for more weeks and half had been unemployed for fewer weeks.

Reference: The Labour Force, Australia (6203.0)

Participation rate — for any group, the labour force expressed as a percentage of the civilian population in the same group.

Reference: The Labour Force, Australia (6203.0)

Part-time employed — employed persons who usually worked less than 35 hours a week and who did so during the reference week.

Reference: The Labour Force, Australia (6203.0)

Part-time employed who want more hours — part-time employed who indicated they would prefer to work more hours.

Reference: The Labour Force, Australia (6203.0)

Service industries — the combination of the following divisions of the *Australia and New Zealand Standard Industrial Classification* (1292.0): wholesale and retail trade; transport and storage; communication; finance, property and business services; public administration and defence; community services; and recreation, personal and other services. Prior to 1985, these divisions of the *Australian Standard Industrial Classification* (1201.0) were used.

Reference: The Labour Force, Australia (6203.0)

Trade union membership rate — the number of employees with membership in a trade union in connection with their main job divided by total employees.

Reference: Trade Union Members, Australia (6325.0)

Unemployed — persons aged 15 years and over who were not employed during the reference week, but who had actively looked for work and were available to start work.

Reference: The Labour Force, Australia (6203.0)

Unemployment/population ratio — the number of unemployed persons in any group, expressed as a proportion of the civilian population in the same group.

Reference: The Labour Force, Australia (6203.0)

Unemployment rate — the number unemployed expressed as a proportion of the labour force. Separate rates may be calculated for sub-groups of the population.

Reference: The Labour Force, Australia (6203.0)

Working days lost due to industrial disputes — total working days lost by employees due to industrial disputes during the year.

Reference: Industrial Disputes, Australia (6322.0)

Youth — aged 15–19 years.

Projections of the labour force

PROJECTIONS

Australia's labour force is projected to grow from 8.6 million people in 1993 to 10.6 million in 2011, largely because of increased participation by women.

The labour force is a fundamental input to domestic production. Its size and composition are therefore crucial factors in economic growth. From the viewpoint of social development, earnings from paid work are a major influence on levels of economic well-being. The labour force thus has implications for government policies and programs in areas such as employment, child care, superannuation and income support. Social concerns about the size and composition of the future labour force therefore tend to revolve about these issues.

Australia's labour force is projected to grow from 8.6 million persons in 1993 to 10.6 million persons in the year 2011. This represents an average annual growth rate of 1.2% over the period. However, the annual growth rates are projected to decline gradually from 1.3% in 1996 to 0.6% in 2011.

Labour force participation

Projections of male labour force participation rates differ markedly across age groups. For men aged 15–19, the participation rate is projected to fall from 55% in 1993 to 52% in 2011. For men aged 45–54, the participation rate is projected to fall slightly from 89% in 1993 to 88% in 2011. The most significant projected decrease is for men in the 55–59 years age group, a fall from 72% in 1993 to 66% in 2011. These projections have been based on the prevailing trends of 1978–93, a

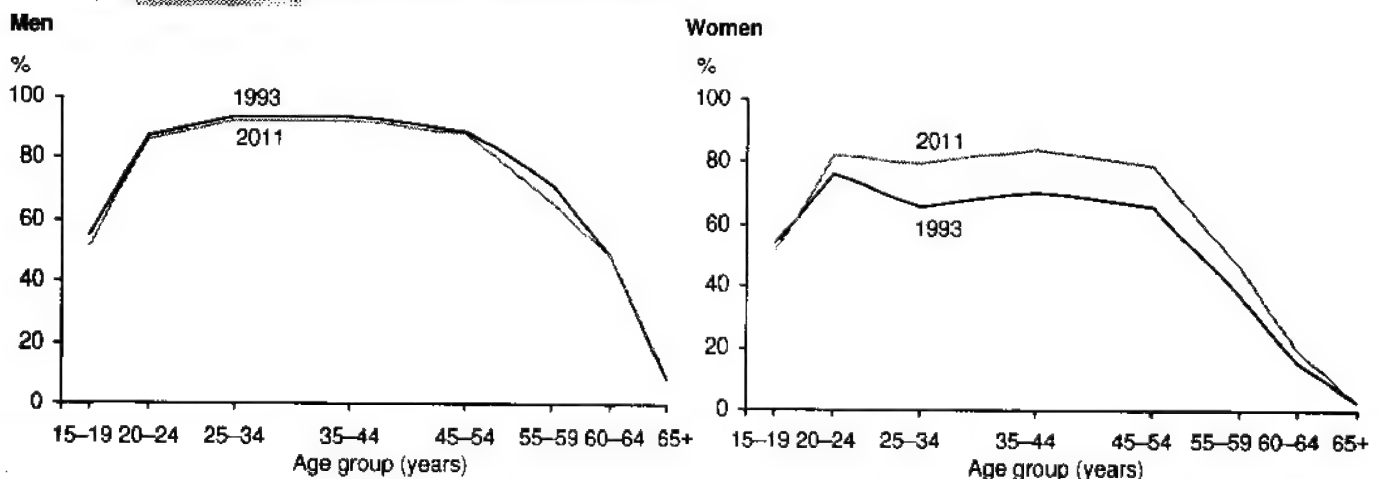
Labour force projections

The *labour force* comprises all persons aged 15 years and over who are employed or unemployed. The *labour force participation rate* for any group is the number in that group who are in the labour force expressed as a percentage of the population in that group. For more details of labour force definitions see *Work — definitions and references* p. 88.

Labour force projections are based on projected labour force participation rates for each age-sex group which are applied to population projections. The population projections series used in this review is Series A because the assumptions (medium fertility, low overseas migration and high interstate migration) most closely reflect prevailing trends (see *Projections of the Populations of Australia, States and Territories 1993 to 2041* (3222.0)). The projected labour force participation rates were determined by fitting a linear time trend to seasonally adjusted monthly data for each age-sex group for the period 1978–93 and extrapolating. Each trend was then assessed against a number of criteria to ensure the resulting projections were meaningful. The criteria included female participation rates not exceeding male participation rates and relative stability between consecutive age-sex groups.

Labour force projections are not predictions or forecasts. They are illustrations of the growth and change in the composition of the labour force that would occur if the assumptions were realised.

Labour force participation rates, 1993 and 2011



Source: Labour Force Projections

period when the labour force was expanding and early retirement became increasingly common (see Australian Social Trends 1994 pp. 126–129 *Early retirement among men*). If new factors enter the picture, such as raising, or dispensing with, compulsory retirement ages, labour force participation rates in older age groups may not drop so significantly.

In contrast, female labour force participation rates are projected to increase for all age groups except those aged 15–19. In the past, female labour force participation rates have shown an M-shaped pattern with the peaks occurring in the 20–24 and 35–44 years age groups. The trough in the 25–34 years age group largely reflects prime child-rearing ages. Increasingly, women are continuing to participate in the labour force after having children and this trend is expected to continue. The labour force participation rate for women aged 25–34 is projected to increase from 66% in 1993 to 79% in 2011 and the rate for women aged 35–44 from 70% to 84% over the same period.

The combination of these projected changes in labour force participation and the projected changes in the size and structure of the population (see *Projections of the working age population* pp. 21–23) results in a projected labour force in 2011 quite different in structure from the labour force of 1993. Overall, male labour force participation is projected to decrease from 74% in 1993 to 69% in 2011 while female labour force participation is projected to increase from 52% to 57%.

By 2011 the number of men in the labour force is projected to be 5.8 million compared to 5.0 million in 1993. This represents an average annual growth rate of 0.8% over the period. In comparison, the number of women is projected to increase from 3.6 million in 1993 to 4.9 million in 2011, an average annual growth rate of 1.7%. In 1993, women made up 42% of the labour force; by 2011 the proportion is projected to increase to 46%.

Related ABS publications

- ◆ Labour Force Projections, Australia, 1995–2011 (6260.0)

Age structure

Both the male and female components of the labour force are projected to age in the next 18 years. In 1993 the median age of the labour force was 36.0 years (36.6 years for men and 35.1 years for women). By 2011 the median

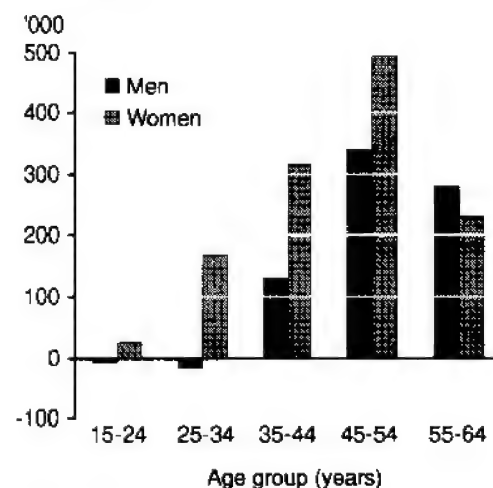
age is projected to have increased to 39.0 years (39.4 years for men and 38.5 years for women).

In 1993 there were 1.87 million people aged 15–24 in the labour force. By 2011 this is projected to have increased slightly to 1.89 million. The number of men aged 15–24 in the labour force is projected to decrease by 7,300 while the number of women is projected to increase by 26,500. People aged 15–24 will be a declining proportion of the total labour force. In 1993, those aged 15–24 represented 22% of the labour force but this is projected to have fallen to 18% by 2011.

In contrast, people in older age groups are projected to contribute a larger share of the labour force. In 1993 there were 641,900 people aged 55–64 in the labour force. This is projected to grow by 507,500 to 1.15 million by 2011, increasing the overall representation of the 55–64 years age group from 7% to 11%.

The biggest increase in the labour force is projected to occur in the 45–54 years age group. Between 1993 and 2011, this group's share of the labour force is projected to increase from 19% to 23%. In this period, the male labour force aged 45–54 is projected to rise by 0.3 million to 1.3 million and the female labour force by 0.5 million to 1.2 million.

Projected gains in the labour force, 1993–2011



Source: Labour Force Projections

The working week

PAID EMPLOYMENT

Average weekly hours worked by full-time workers have been increasing. This is mainly because more people are working more hours without additional pay.

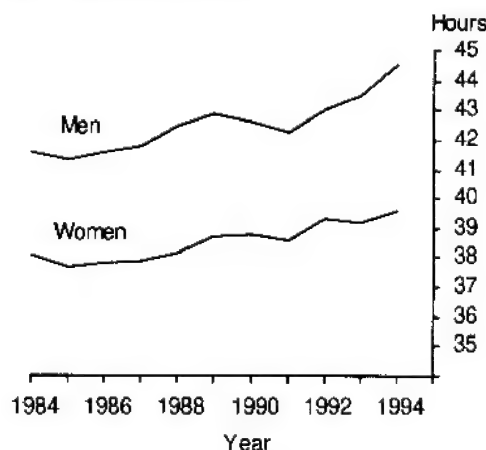
Over the last 30 years, total hours of paid work have increased in Australia. In August 1994, 287 million hours were worked per week compared to about 188 million in August 1966, an increase of 52%. This increase reflects not only population growth and the resultant larger numbers in the labour force, an increase of 77% over the period, but also changes in labour force participation, particularly among married women. In August 1994, 53% of married women were in the labour force compared to 29% in August 1966.

While weekly aggregate hours have been increasing since 1966, there has been a considerable reduction in the average weekly hours worked per worker, from 39.1 to 36.4 hours per week. This is mainly due to the increasing prevalence of part-time work.

Trends in weekly hours worked

One of the aims of the trade union movement has been to progress towards a shorter working day and working week. Early this century the agreed working hours for full-time employees were about 49 hours a week. Throughout the 1920s and 1930s cases were argued before various industrial tribunals for reductions to this. By 1948 all state industrial tribunals and the Commonwealth Court of Conciliation and Arbitration had adopted the 40 hour week (8

Average weekly hours worked by full-time workers



Source: Labour Force Survey (August)

Hours worked and worker status

The Labour Force Survey measures *hours worked* as the number of hours actually worked by employed people in the reference week. It includes paid and unpaid employment. Paid leave, flextime or rostered days off are excluded.

Actual hours of work may differ from that legislated as the standard working week. Actual hours may be reduced due to leave, public holiday entitlements and time not spent working because of bad weather or industrial disputes. Actual hours may be increased due to overtime worked, both paid and unpaid.

Full-time workers are employed persons who usually work 35 hours or more a week (in all jobs) and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Part-time workers are employed persons who usually work less than 35 hours a week and who did so during the reference week.

Casual employees are those not entitled to either annual or sick leave in their positions.

hour day and 5 day week). This remained the case for the next few decades¹.

In the late 1970s, cases were presented arguing for further reductions and by the 1980s, a 35 or 38 hour week was the standard in many industries¹. Despite the trend towards part-time work, there has been little change in the overall average hours worked by employed people in recent years. That is, increases in the average hours worked by full-time workers have offset the increased proportion of part-time workers.

Among full-time workers, both men and women increased their average working hours between 1984 and 1994. In 1984 full-time employed men worked an average of 41.6 hours a week, while women worked an average of 38.1 hours. In 1994 the averages were 44.5 and 39.6 hours respectively.

The increase in the average weekly hours of full-time work has been attributed to a number of factors including: fewer absences from work due to illness or injury; a decrease in the proportion of workers using their full holiday leave entitlements; and a decrease in time lost due to industrial disputes².

Distribution of weekly hours worked by full-time workers

Hours worked	Men		Women		Persons	
	1984	1994	1984	1994	1984	1994
	%	%	%	%	%	%
0(a)	4.7	3.7	4.7	4.1	4.7	3.9
1-34(a)	10.1	8.4	11.7	11.1	10.6	9.3
35-39	18.9	16.2	29.3	30.2	21.9	20.7
40-48	44.1	38.6	45.1	39.5	44.4	38.9
49 & over	22.2	33.1	9.1	15.1	18.4	27.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) Full-time workers may have worked less than 35 hours in the survey week due to leave, illness, bad weather etc.

Source: Labour Force Survey (August)

However, these reasons only explain a small part of this increase. Other possible reasons such as increases in overtime and the number of workers with more than one job are not supported by data. It is likely therefore that more people are working more hours without additional pay³.

In August 1994, two-thirds of full-time workers worked 40 hours or more a week. Equal proportions of men and women worked 40-48 hours a week but proportionally twice as many men as women worked 49 hours or more. 33% of full-time employed men and 15% of full-time employed women in 1994 worked 49 hours or more a week compared to 22% of full-time employed men and 9% of full-time employed women in 1984.

The average weekly hours worked by full-time workers increased for all occupations between

1986 and 1994. The largest increase, about 4 hours a week, occurred for plant and machine operators and drivers, who worked an average 44 hours a week in 1994. Clerks, with an average working week of 38 hours in 1994, had the shortest average working week of all full-time employees.

In both 1986 and 1994, managers and administrators worked considerably longer hours than any other occupation group. Between 1986 and 1994 this group also had a high rate of increase in full-time employment, 19% compared to 6% overall. It was also the only occupation group to record a greater proportional increase in full-time employment than in part-time. An increase in the number of people employed in such occupations reflects both structural change in the economy and a more highly educated labour force.

The increase in part-time work

Growth in part-time work is characteristic of all developed countries. Among OECD countries Australia is one of the larger employers of part-time labour⁴, but the average hours worked are lower than in other countries⁵. Nevertheless, part-time hours have increased in recent years. Among men, part-time hours declined between 1984 and 1989, from 16.1 to 14.4 but have since increased, reaching 15.5 in 1993. Among women an increase in part-time hours occurred between 1991 and 1994, from 15.5 to 16.1.

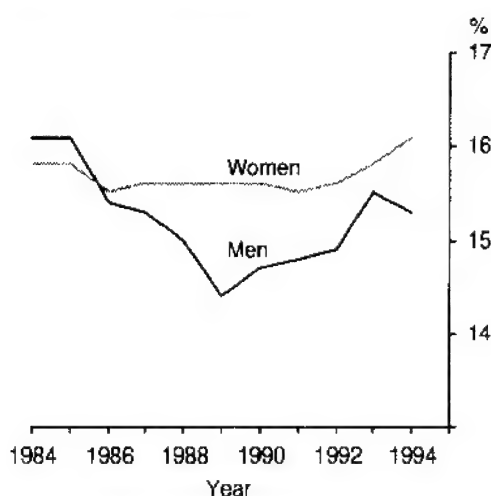
Two factors account for the growth in part-time work. The first of these is growth in the service sector which is more suited to part-time employment. Total employment in the recreation, personal and other services industry almost doubled between August

Average weekly hours worked by full-time workers

Occupation	1986	1994
	hours	hours
Managers and administrators	51.0	52.1
Professionals	41.3	44.0
Para-professionals	37.4	39.7
Tradespersons	39.6	42.4
Clerks	36.0	38.1
Salespersons and personal service workers	41.4	42.4
Plant and machine operators, and drivers	40.2	43.7
Labourers and related workers	37.8	39.7
Total	40.5	43.0

Source: Labour Force Survey (August)

Average weekly hours worked by part-time workers



Source: Labour Force Survey (August)

1984 and August 1994. Similarly the finance, property and business services industry increased by two-thirds. Part-time employment in both these industries more than doubled.

The second factor is the increased desire of women to participate in the labour force, particularly on a part-time basis. In August 1994 the number of women employed part-time exceeded the number of men

employed part-time in all industries except transport and storage.

Industries with the highest rates of part-time employment in August 1994 were recreation, personal and other services (38%), community services (35%), wholesale and retail trade (33%), finance property and business services (22%) and agriculture, forestry, fishing and hunting (22%). It is these same industries, apart from agriculture, forestry, fishing and hunting, which have the highest proportion of women employed part-time.

For more information on trends in part-time employment see Australian Social Trends 1994 pp. 103–108 *Trends in part-time work*.

Endnotes

- 1 National Institute of Labour Studies Inc., Flinders University of South Australia (1994) *Work Sharing and Unemployment Working Paper No 129*.
- 2 Dawkins, P.J. and Simpson, M. (1993) *Work, Leisure and the Competitiveness of Australian Industry* Report prepared for CEDA, Melbourne.
- 3 Wooden, M. *The Australian Labour Market - September 1993* Australian Bulletin of Labour, Vol 19, No 3.
- 4 OECD (1994) *Statistics on the Member Countries*, Supplement to the OECD Observer No.188.

Related ABS publications

- ◆ The Labour Force, Australia (6203.0)

Home workers

PAID EMPLOYMENT

Between 1989 and 1992 the number of home workers increased by 15% to 308,000. An increase occurred in most industries and occupations. Twice as many women as men were home workers.

In most industries and occupations the numbers of home workers are increasing. Factors related to this increase include advances in information technology and communications, employee demand for greater flexibility in work patterns and wider acceptance by employers of working at home as an alternative to centralised workplaces.

Between 1989 and 1992, the number of home workers increased by 41,300 (15%). In 1989, 3% of employed persons were home workers and a further 19% worked some hours at home but were not classified as home workers. Equivalent figures for 1992 were 4% and 22% respectively. In 1992, twice as many women as men were home workers. 'Women's involvement in home work is due not only to their family responsibilities, which tie them to the home, but also to their weaker position in the labour market'¹.

Benefits

Working at home can offer benefits to employees, employers and society as a whole. Home workers, whether employees or self-employed, enjoy benefits including no commuting time or cost, an increase in family contact, greater flexibility in working hours, convenience, and decreased levels of stress. For the self-employed, there are tax

Home workers

The ABS collects information on employed persons who work at home through the Survey of Persons Employed at Home. People who work any hours at home are included in the survey, but only those who usually work more hours at home than elsewhere, in their main or second job, are classified as employed at home. In this review, they are referred to as *home workers*. Farmers (ASCO unit groups 1401 and 8201), unpaid voluntary workers, people who work less than one hour and people who work from home, but who spend most of their working time away from home, are not counted as home workers.

advantages and substantial savings in overheads in working at home. Employers benefit through savings in overheads, increased productivity, greater retention of skilled personnel, and decreased absenteeism and staff turnover².

Home work may also increase employment opportunities for disabled workers. The home environment is likely to be already adapted to the special needs of disabled workers.

Finally, there are benefits to the environment. Home workers do not need to commute. This helps reduce pollution from commuter

Industry	1989		1992	
	Home workers	% of all workers	Home workers	% of all workers
	'000	%	'000	%
Recreation, personal, other services	37.2	6.7	46.3	7.4
Construction	37.9	6.4	37.2	7.2
Finance, property, business services	47.1	5.5	61.8	7.0
Wholesale and retail trade	47.1	3.0	54.1	3.4
Manufacturing	34.4	2.8	37.1	3.3
Community services	41.2	3.0	44.8	3.1
Transport, storage, communication	10.5	2.0	14.5	2.8
Agriculture, forestry, fishing, hunting	9.1	2.1	9.5	2.3
Other(a)	2.0*	0.4	2.7*	0.5
Total	266.6	3.4	307.9	4.0

(a) Includes mining; electricity, gas and water; public administration and defence.

Source: Survey of Persons Employed at Home; Labour Force Survey

transport and eases the strain on energy resources.

Costs

Working at home is not without its costs. Employers may face problems with supervising staff and ensuring home duties are not affecting work performance, accessing their staff, achieving a team work approach, and ensuring data security and confidentiality².

Employees can be disadvantaged by their lack of bargaining power for better pay and conditions. In addition costs may take the form of a sense of isolation, lack of access to on-the-job training, and lack of equipment or a suitable environment in which to work.

Industry

In many industrialised countries, the proportion of people working at home was either stable or in decline over the last decade or so. However, it has again increased because of its wide use in the service sector³.

Home workers are most likely to work in the service industries. In March 1992, more than two-thirds of home workers were employed in the service industries: 61,800 in finance, property and business services; 54,100 in wholesale and retail trade; 46,300 in recreation, personal and other services; and 44,800 in community services. The number of home workers grew between 1989 and 1992 in all industries except construction, with the

most substantial growth in finance, property and business services.

Occupation

The greatest number of home workers were clerks who comprised nearly 40% of all home workers. However, in line with ILO findings, it is the service sector where growth has been strongest. Between 1989 and 1992, the number of sales and personal service home workers increased by 36%. This was followed by professionals with a 32% increase in home workers in the period.

Female home workers outnumbered male home workers in four of the eight occupation groups and, in the other four, they represented 40-50% of home workers. The largest occupation groups for home workers were clerks for women (55%) and professionals for men (34%).

Home working among men was most common among professionals, with 6% of all male professionals being home workers. For women, the highest proportion of home workers (12%) was found among tradespersons, followed closely by clerks (11%). It is likely that many of the tradespersons were hairdressers.

Status of home worker

In both 1989 and 1992, 52% of home workers were self-employed or unpaid family helpers. Between 1989 and 1992 the number of self-employed or unpaid family home workers

Occupation of home workers, 1989-1992

Occupation	Men		Women		Persons	
	Home workers	% of all workers	Home workers	% of all workers	Home workers	% of all workers
	'000	%	'000	%	'000	%
Clerks	7.6	2.6	113.4	11.4	121.0	9.4
Professionals	34.5	5.9	25.3	5.9	59.8	5.9
Managers and administrators	16.4	2.6	11.2	5.2	27.6	3.3
Salespersons and personal service workers	10.6	2.5	26.7	3.5	37.2	3.2
Tradespersons	20.5	2.0	14.0	12.3	34.5	3.0
Plant and machine operators, and drivers	3.3*	0.7	6.5	7.5	9.8	1.8
Labourers and related workers	6.5	0.9	8.0	2.0	14.4	1.2
Para-professionals	1.9*	0.7	1.7*	0.8	3.6	0.8
Total	101.2	2.3	206.7	6.5	307.9	4.0

Source: Survey of Persons Employed at Home

Employment status of home workers

Employment status	1989			1992		
	Men	Women	Persons	Men	Women	Persons
	'000	'000	'000	'000	'000	'000
Self-employed/unpaid family helper	45.1	93.6	138.6	54.2	107.4	161.6
Employees	23.9	69.2	93.1	36.8	75.7	112.4
Employer	10.5	21.4	31.9	9.7	22.0	31.7
Total(a)	80.3	186.2	266.6	101.2	206.7	307.9

(a) Includes home workers receiving payment in kind.

Source: Survey of Persons Employed at Home

increased by 17% from 138,600 to 161,600. In the same period the number of employee home workers increased by 21%, to 112,400.

In 1992 the distributions of the various types of home worker were very similar for men and women. These proportions differed from 1989 when female home workers were more likely than male home workers to have been employees and less likely to have been self-employed or employers.

Between 1989 and 1992 the proportion of male home workers who were employees increased from 30% to 36%, offset by relative decreases in the other two categories. For women, the distribution changed only marginally with a slight increase from 50% to 52% in the proportion who were self-employed or unpaid family workers.

As information systems and electronic communication devices develop further it will become increasingly practical for small businesses to operate from a home base³.

Working hours and conditions

In 1992, 91% of all home workers stated that their home job was their main job. However, 67% of home workers usually worked less than 35 hours a week at home and 45% usually worked less than 20 hours a week at home.

Of all employees working at home in 1992, 56% were casual workers. Consequently they were not entitled to paid sick leave or holiday leave. 53% of these employees were covered for workers' compensation. However they had a low rate of employer provided superannuation (36%) and an extremely low rate of trade union coverage (7%).

This is quite different from the situation of all employees not working at home in 1992. Employees not working at home were more likely to be covered by worker's compensation as by state/territory law their employer is liable for any injury occurring at the workplace. They also had higher rates of employer provided superannuation and trade union membership⁴.

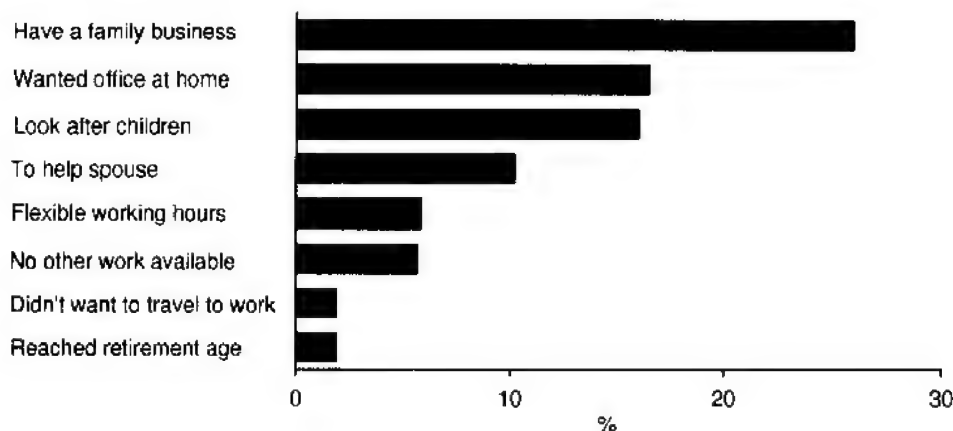
Home workers by usual weekly hours worked, 1992

Family status	Under 20 hours	20-34 hours	35-39 hours	40 hours or more	Total
	'000	'000	'000	'000	'000
Family member with children aged 0-14 years	77.3	34.3	7.3	27.8	146.8
One or more child(ren) aged under 3 years	29.5	11.9	1.0*	7.9	50.3
Children aged 3-14 years only	47.8	22.4	6.3	19.9	96.5
Family member without children 0-14 or not a member of a family	58.6	31.8	11.6	40.6	142.6
Total(a)	139.0	67.5	19.3	82.2	307.9

(a) Includes those for whom family status could not be determined.

Source: Survey of Persons Employed at Home

Main reason home workers began working at home, 1992



Source: Survey of Persons Employed at Home

Earnings

The average usual gross weekly pay of employees working at home in March 1992 was \$279. This apparent low rate of pay was due to the high proportion of home workers working less than 20 hours a week in their home job.

In all industries, most employees working at home were paid on an hourly basis. However in finance, property and business services 27% of employees working at home were paid by receipt of a share of the annual profit of their employer.

The impact of family

In 1992, there were slightly more home workers living with children under 15 years than without children under 15 years (146,800 compared to 142,600).

Home workers with younger children in the family tended to work fewer hours a week than those with older children or no children. This pattern is similar to overall labour force trends which show that the number of hours women work increases as their youngest child reaches school age. 82% of people with one or more children under 3 years worked less than 35 hours a week compared to 73% with children aged 3–14 years only and 63% without children.

Reasons for beginning to work at home

In 1992 the most common reasons given by both men and women for beginning to work at home related to operating a business. For men 27% said the main reason they began working at home was because they wanted an office at home/no overheads/no rent. The next most common response among men was to open or operate their own family business (26%).

For women the primary reason for beginning to work at home was to open/operate own/family business (26%). The next most common response was children too young/preferred to look after children (23%).

Endnotes

- 1 Schneider de Villegas, G. (1989) *Home Work: An overview* ILO Conditions of Work Digest, Vol. 8, No. 2.
- 2 Wood, J. (1992) *Telecommuting: Making the Future Work for Australia* Management Review, Vol 17, no 7.
- 3 Cranswick, K. (1994) *Technology's Tools of Trade* Business Review Weekly, August 22, 1994.
- 4 Trade Union Members, Australia (6325.0).

Related ABS publications

- ◆ Persons Employed at Home, Australia (6275.0)

Youth unemployment

UNEMPLOYMENT

In 1994 over 300,000 people aged 15–24 were unemployed. Young women currently have the same unemployment rate as young men.

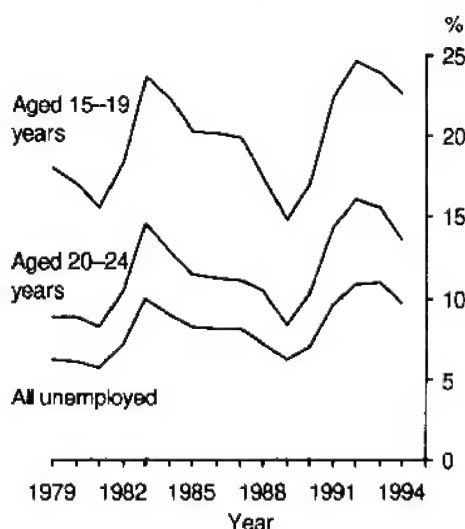
Youth unemployment is a major issue for the government, policy makers and planners. Although unemployment is a social problem, youth unemployment is of particular concern because of the effect it can have on a person's future. Youth is an important time for choosing a career, gaining and developing skills, establishing an identity and obtaining independence.

Unemployed youth form a large proportion of the total unemployed population. In 1994, of the 855,500 unemployed people, 38% were aged 15–24. 54% of these unemployed youth were men.

Over the last 15 years, the youth unemployment rate has been much higher than the total unemployment rate. In 1994, the youth unemployment rate was 17% compared to an overall unemployment rate of 10%. People aged 15–19 had the highest rate of unemployment of any age group, 23%.

In 1994, unemployment rates were the same for men and women aged 15–19. However, the unemployment rate of those aged 20–24 was higher for men than for women, 15% compared to 12%. Overall, people aged 20–24 had an unemployment rate of 14%.

Unemployment rates



Source: Labour Force Survey (annual averages)

Measuring youth unemployment

In this review the term *youth* refers to all people aged 15–24. This is a broader usage of the term than that in the summary tables where youth refers only to the subset aged 15–19. This group, and those aged 20–24, are treated separately in this review.

Youth unemployment refers to the number of people aged 15–24 who are unemployed. The *youth unemployment rate* is the number of unemployed youth divided by the number of youth who are in the labour force (employed and unemployed). The *youth full-time unemployment rate* is the number of youth who are looking for full-time work as a proportion of the youth full-time labour force (the number of unemployed people looking for full-time work plus the number of people employed full-time). This is an important measure because most full-time unemployed youth are seeking to begin a career, to gain training and to obtain independence. In contrast, many part-time unemployed youth are studying to obtain qualifications leading to a career.

The unemployment rate and the full-time unemployment rate are often misinterpreted as the proportion of all youth who are unemployed. However, they do not take into account the many people between the ages of 15 and 24 who are attending an educational institution full-time and may have no current interest in joining the labour force. An alternative measure is the *youth unemployment/fully active ratio*. It is the number of unemployed youth who are not attending an educational institution full-time as a proportion of the youth labour force plus others attending an educational institution full-time.

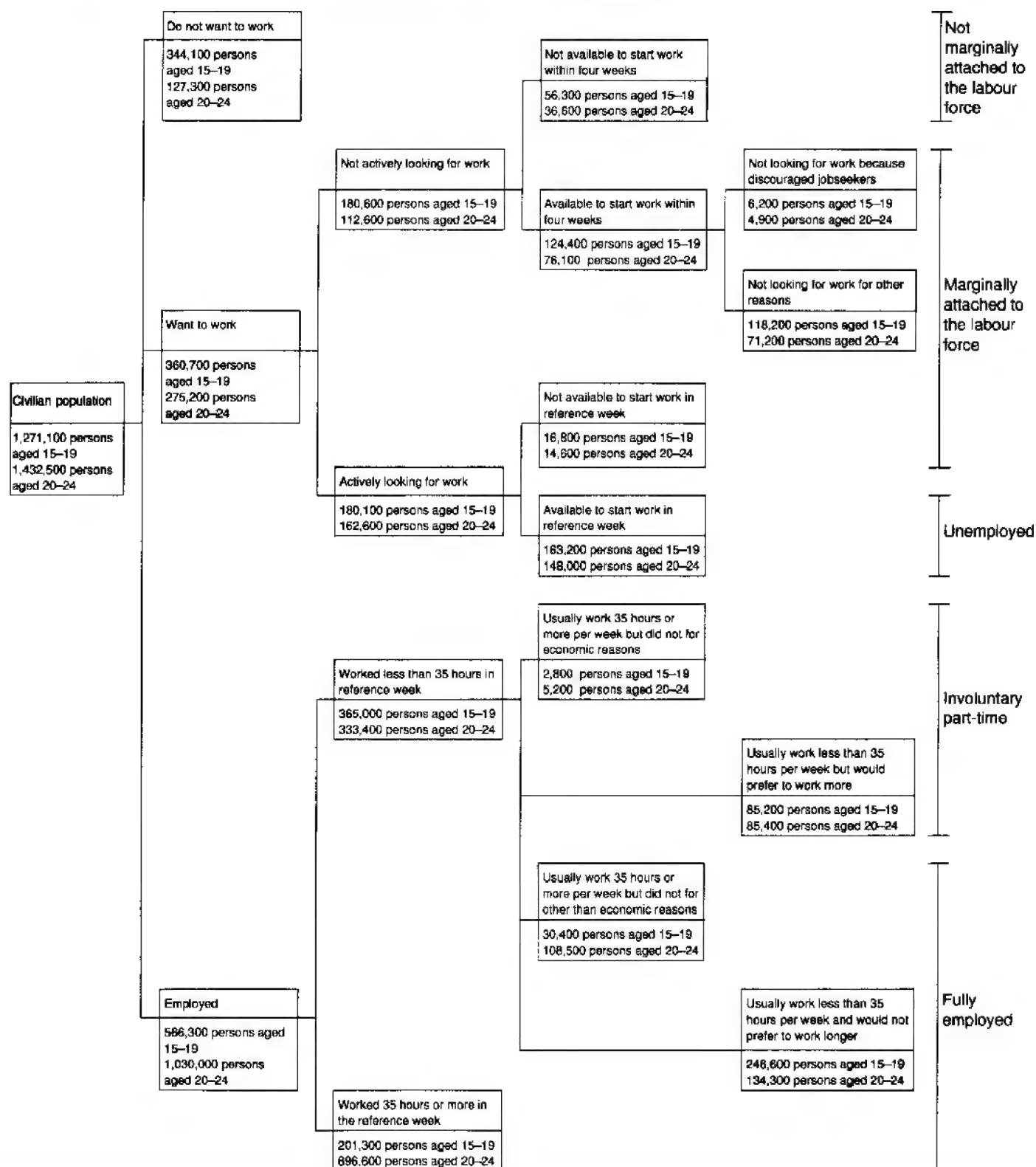
The *labour force participation rate* measures the proportion of the civilian population which is in the labour force.

Full-time unemployment

Youth full-time unemployment rates were higher than total youth unemployment rates in 1994. The full-time unemployment rate for youth was 19%. Those aged 15–19 had a full-time unemployment rate of 30% and those aged 20–24 had a full-time unemployment rate of 15%.

Women aged 15–19 had a particularly high full-time unemployment rate (35%), 7 percentage points higher than the rate for men aged 15–19 (28%). In contrast, women aged 20–24 had a full-time unemployment

The labour force framework, September, 1994



Source: Labour Force Survey

rate of 14% compared to a full-time unemployment rate of 16% for men of the same age.

Labour force participation

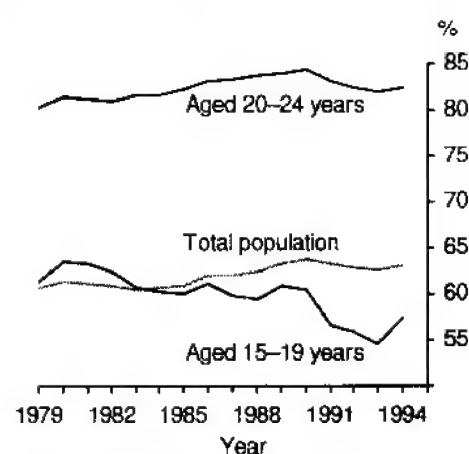
It is important to consider youth unemployment rates in the context of labour force participation rates, particularly for teenagers. This is because many are studying full-time and may have no current interest in working or looking for work.

In 1994, the labour force participation rate of people aged 15–19 was 57% compared to 63% for the total population. Participation rates for people aged 15–19 had been similar to those of the total population until 1986, when they started to decrease. This was the result of an increase in the number of people aged 15–19 staying at school or continuing to further education rather than entering the labour force. In 1994, 38% of people aged 15–19 were not in the labour force and were attending an educational institution. In contrast, labour force participation rates for people aged 20–24 have been much higher than those for the total population over the past 15 years. In 1994, their participation rate was 82%.

Youth unemployment and educational participation

In May 1994, the unemployment/fully active ratio for people aged 15–19 was 8% compared to 11% for those aged 20–24 and 7% for those aged 25–64. Comparing these rates with the other measures of unemployment presented shows a reversal of position between those aged 15–19 and those aged 20–24. This suggests that the older group may have more

Labour force participation rates



Source: Labour Force Survey (annual averages)

difficulty in finding permanent employment than the younger group.

In terms of standard unemployment rates, 30% of people aged 15–19 who were not attending an educational institution were unemployed compared to 15% of those aged 20–24. In contrast, people aged 15–19 who were attending school had an unemployment rate of 19%, which was similar to that of people aged 15–19 who were undertaking full-time tertiary education (22%). Although these rates are high, many of these people would be seeking part-time employment to supplement their incomes while they are studying. People aged 20–24 who were undertaking tertiary education full-time had an unemployment rate of 14%.

High rates of unemployment among youth not attending an educational institution are likely to be related to low levels of educational attainment. In 1994, 45% of unemployed people aged 15–19 who were not attending

Unemployment and attendance at an educational institution, 1994

Attendance	Aged 15–19 years			Aged 20–24 years		
	Number	Unemployment rate	Participation rate	Number	Unemployment rate	Participation rate
	'000	%	%	'000	%	%
Attending	70.9	17.9	42.9	26.7	10.8	65.1
Attending school	40.6	19.1	33.8	1.2*	70.5*	15.1*
Full-time tertiary	21.8	21.9	47.5	15.6	13.6	49.6
Part-time tertiary	8.5	10.0	97.0	9.9	7.6	95.7
Not attending	92.1	30.1	88.8	136.4	14.7	88.3
Total	163.0	23.2	55.3	163.1	13.9	82.1

Source: Survey of Transition from Education to Work

school had not completed the highest level of secondary school, compared to 35% of employed people aged 15–19 not attending school. For those aged 20–24, 40% of unemployed people had not completed the highest level of secondary school compared to 23% of employed people in this age group¹.

Unemployed women aged 20–24 were less likely than unemployed men of the same age to have not completed the highest level of secondary school. 42% of unemployed men and 36% of unemployed women aged 20–24 had not completed the highest level of secondary school.

Reasons for unemployment

Among unemployed youth, it was more common to have lost a job than to have left a job. In 1994, 24% of unemployed youth were job losers and 15% were job leavers. The others were looking for their first job, or had re-entered the labour force after two or more years out of it.

The main reason for unemployment among people aged 15–19, given by 37% of them, was that they were looking for their first full-time job. A further 15% said they had lost their previous job. Most of these (68%) had been laid off or retrenched.

19% of unemployed youth aged 20–24 said they had left their last job. A further 33% said they had lost their last job. 67% of these job losers had been laid off or retrenched.

States and territories

In 1994, Tasmania and South Australia had the highest rates of youth unemployment at 20%. The Australian Capital Territory and the Northern Territory had the lowest at 15%.

Among people aged 15–19, the highest rate of unemployment, 28%, was experienced in South Australia. Victoria and Tasmania also had high rates of unemployment for this age group, 25% and 24% respectively. These states also had high rates of unemployment overall.

For people aged 20–24, Tasmania had the highest rate of unemployment (17%). Unemployment rates were lowest for this age group in the two territories.

In the Australian Capital Territory, youth comprised about half of all unemployed people in 1994. In contrast, just over one-third of all unemployed people in New South Wales were aged 15–24.

International comparison

In 1993, of the thirteen OECD countries for which data on youth unemployment were available, Australia's youth unemployment rate (19%) was fifth highest. Spain had the highest youth unemployment rate at 43%. Japan had the lowest at 5%. The United States and the United Kingdom had lower youth unemployment rates than Australia.

Caution should be exercised when making international comparisons of statistics of youth unemployment due to differences in age coverage, for example. Statistics for Italy are based on youth aged 14–24; for Australia, Canada, Finland, France, Japan, New Zealand and Portugal on youth aged 15–24; and for Norway, Spain, Sweden, the United Kingdom and the United States on youth aged 16–24.

Youth unemployment rates in selected OECD countries, 1993

Country	Youth		
	Youth under 20 years (a)	20–24 years	All youth (a)
	%	%	%
Spain	50.3	40.5	43.2
Italy	36.4	28.6	30.6
Finland	32.6	29.6	30.5
France	26.5	24.4	24.6
Australia	23.0	16.1	18.6
Sweden	19.2	18.1	18.4
Canada	19.9	16.4	17.8
UK	19.2	16.4	17.3
New Zealand	21.3	14.7	17.2
Norway	19.3	11.9	13.9
USA	19.0	10.5	13.3
Portugal	13.6	11.2	12.0
Japan	7.1	4.7	5.1

(a) Age groups vary between countries, see text above.

Source: OECD (1994) *Employment Outlook 1994*

Unemployment rates for youth were lower in capital cities than in the rest of the state in all states except Western Australia and South Australia. The highest rate of youth unemployment, 21%, was experienced in Adelaide, non-metropolitan Victoria and non-metropolitan New South Wales. Sydney and non-metropolitan Western Australia had the lowest rate of youth unemployment (14%).

Unemployment rates, 1994

State	15-19 years	20-24 years	All youth	All persons
	%	%	%	%
NSW	21.7	12.6	16.1	9.6
Vic.	25.2	15.5	19.0	10.8
Qld	21.4	13.0	16.4	9.3
SA	28.1	14.9	19.8	10.6
WA	18.5	12.0	16.1	8.2
Tas.	24.4	16.8	19.9	11.1
NT	21.3	11.2	14.6	7.5
ACT	23.3	10.7	15.2	7.2

Source: Labour Force Survey (annual averages)

Birthplace

Young people born overseas were more likely to be unemployed than those who were Australian born. The unemployment rate in 1994 for overseas born people aged 15-19 was 28% compared to 22% for those born in Australia. People aged 20-24 who were overseas born had an unemployment rate of 18% compared to 13% for those who were Australian born. Youth born in non-English speaking countries had an unemployment rate of 32%, nearly double that of Australian born youth (18%) and youth born in the main English speaking countries (17%).

Lower education levels coupled with language difficulties among unemployed young people born overseas partly explain these differences. In February 1994, 72% of unemployed youth born in other than the main English speaking countries had no post-school qualifications. This compared to 64% of unemployed youth born in the main English speaking countries and 70% of unemployed Australian born youth¹.

Long-term unemployment

Long-term unemployment, that is, being unemployed for 52 weeks or more, can be of particular concern for young people especially those who may never have worked. The likelihood of obtaining employment decreases as the length of time in unemployment increases². Consequently, in *Working Nation*, the White Paper on Employment and Growth, the government introduced a range of policies to assist long-term unemployed people to find work. The main elements include providing individual case management and training for the long-term unemployed, and subsidising

Unemployment rates by birthplace, 1994

Age group (years)	Australian born	Overseas born
	%	%
<i>Aged 15-19</i>	22.2	27.6
Men	22.0	29.4
Women	22.5	26.0
<i>Aged 20-24</i>	12.9	18.4
Men	14.3	18.4
Women	11.3	18.4
<i>All unemployed</i>	9.1	11.6
Men	9.5	11.6
Women	8.7	11.7

Source: Labour Force Survey (annual averages)

employers when placing the long-term unemployed.

In May 1994, three-quarters of unemployed people aged 15-19 had been in full-time or part-time education a year earlier³. Reflecting this, the proportion who were long-term unemployed in 1994 was 17% compared to 36% of all unemployed people. There was little difference in the proportions of long-term unemployed young men and women.

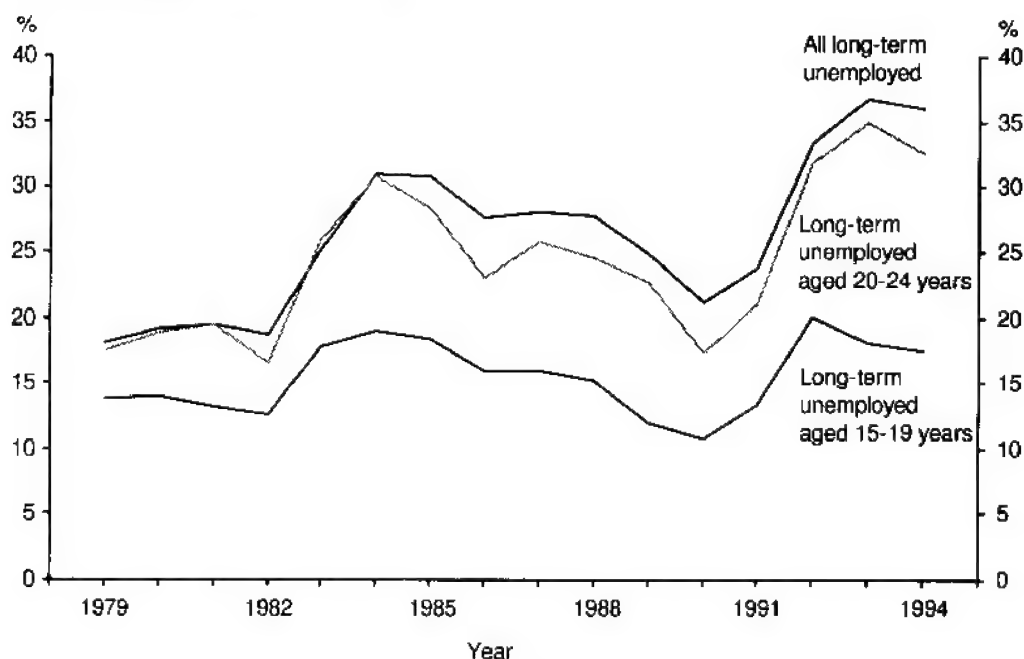
33% of unemployed people aged 20-24 were long-term unemployed. The proportion of women (31%) was slightly lower than that of men (34%).

Part-time employment

Many people aged 15-24 combine work and education and so choose to work part-time. However, many others employed part-time would prefer to work more hours, but are unable to obtain the work. In 1994, of the 220,200 people aged 20-24 who were working part-time, 45% preferred to work more hours. 30% of the 328,900 part-time employed people aged 15-19 also preferred to work more hours.

Discouraged jobseekers

An increase in unemployment can also lead to an increase in the number of discouraged jobseekers. These are people who are disillusioned about their job prospects and have given up looking for work but would be available to start a job if one were offered. In September 1994, discouraged jobseekers

Long-term unemployment^(a)

(a) Proportion of unemployed people who have been unemployed for a period of 52 weeks or more.

Source: Labour Force Survey (annual averages)

Related ABS publications

- ◆ The Labour Force, Australia (6203.0)
- ◆ Transition from Education to Work, Australia (6227.0)

accounted for 1% of people aged 15–19 (6,200 persons) and 2% of people aged 20–24 (4,900 persons) who were not in the labour force. Young women were more likely to be discouraged jobseekers than young men.

Endnotes

- 1 Labour Force Status and Educational Attainment, Australia (6235.0).
- 2 Australia's Long-term Unemployed: A Statistical Profile (6255.0).
- 3 Transition from Education to Work, Australia (6227.0).

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Much of the difference between men's and women's earnings can be explained by the different hours they work and the sorts of jobs that they do.

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In 1994 women contributed, on average, 35% of the earnings of couples with children. When both partners worked full-time, women contributed 43%.

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The estimated value of the 18 billion hours of unpaid work performed in 1992 was \$228 billion. Women contributed 65% of this.

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Despite increasing superannuation coverage among Australians, most people do not contribute enough to provide them with an adequate retirement income.

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Between 1974 and 1994, on average, prices increased 4.5 times. In the same period, disposable household incomes increased 5.5 times.

Income — national summary

INCOME DISTRIBUTION		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GDP(A) per capita (1989-90 prices)	\$'000		18.0	18.7	19.4	20.0	20.1	20.8	21.4	21.8	21.4	21.2	21.6
Real household disposable income per mean head of population	\$'000		n.a.	n.a.	12.7	12.9	12.6	12.9	13.4	13.8	13.6	13.7	13.7
Share of gross income going to top quintile (of all income units)	%		n.a.	n.a.	n.a.	45.3	n.a.	n.a.	n.a.	46.2	n.a.	n.a.	n.a.
Share of gross income going to bottom quintile (of all income units)	%		n.a.	n.a.	n.a.	4.7	n.a.	n.a.	n.a.	4.8	n.a.	n.a.	n.a.
Gini coefficient (of all income units)	no.		n.a.	n.a.	n.a.	0.41	n.a.	n.a.	n.a.	0.42	n.a.	n.a.	n.a.
Median gross weekly income of married couple with dependants income units	\$		n.a.	n.a.	n.a.	550	n.a.	n.a.	n.a.	755	n.a.	n.a.	n.a.
Median gross weekly income of one parent income units	\$		n.a.	n.a.	n.a.	220	n.a.	n.a.	n.a.	278	n.a.	n.a.	n.a.
SOURCES OF INCOME		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Main income source from government benefits (of all income units)	%		n.a.	n.a.	n.a.	27.7	n.a.	n.a.	n.a.	26.6	n.a.	n.a.	n.a.
Main income source from government benefits (of married couples with dependants income units)	%		n.a.	n.a.	n.a.	8.4	n.a.	n.a.	n.a.	8.4	n.a.	n.a.	n.a.
Main income source from government benefits (of one parent income units)	%		n.a.	n.a.	n.a.	64.4	n.a.	n.a.	n.a.	61.3	n.a.	n.a.	n.a.
Mean total weekly earnings of all employees	\$		297	n.a.	346	368	384	411	441	475	494	510	526
Mean total weekly earnings of full-time adult employees	\$		355	n.a.	410	436	462	497	538	571	597	616	641
Mean weekly ordinary time earnings of full-time non-managerial adult employees	\$		318	n.a.	361	384	406	433	466	495	521	541	558
Female/male ratio of mean total full-time adult weekly earnings	no.		0.79	n.a.	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.82	0.80
INCOME SUPPORT		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Aged on age pension	%		74.0	70.4	67.1	64.6	62.7	61.5	60.2	59.2	59.3	61.0	62.7
Age pensioners	'000		1 391	1 358	1 332	1 325	1 322	1 329	1 334	1 340	1 376	1 446	1 516
Unemployment beneficiaries	'000		633.3	588.1	562.3	568.7	553.7	478.0	389.8	419.8	676.7	851.8	913.8
Disability support pensioners	'000		220.3	240.6	259.2	273.8	289.1	296.9	307.8	306.7	334.2	378.6	406.6
Sole parent pensioners	'000		224.5	234.7	246.3	250.9	248.9	238.7	239.5	248.9	265.7	278.2	298.4
GDP spent on income support	%		6.7	6.8	6.6	6.3	6.1	5.8	5.4	5.4	6.2	7.2	7.5
EXPENDITURE		Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Consumer price index	no.		60.9	65.0	67.8	73.5	80.4	86.3	92.6	100.0	105.3	107.3	108.4

Reference periods:

Data for GDP(A) per capita, real household disposable income, income support and expenditure are for the financial year ending 30 June.

Income — state summary

INCOME DISTRIBUTION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Gross state product per head of mean population (market price)	\$'000	1992-93	23.2	24.0	21.3	20.7	25.7	18.7	24.9	29.7	23.1
Household disposable income per mean head of population	\$'000	1992-93	15.6	15.8	14.0	14.3	14.8	13.1	13.7	19.8	15.2
Share of net equivalent income going to top quintile (of net income less housing costs)	%	1990	37.8	37.9	37.5	36.5	37.9	36.8	35.2	37.5	37.7
Share of net equivalent income going to bottom quintile (of net income less housing costs)	%	1990	7.5	7.6	7.5	8.2	7.3	8.0	7.4	7.5	7.6
Gini coefficient (net equivalent income less housing costs)	no.	1990	0.30	0.30	0.30	0.28	0.30	0.29	0.28	0.30	0.30
Median gross weekly income of married couple with dependants income units	\$	1990	809	748	672	702	765	673	921	926	755
Median gross weekly income of one parent income units	\$	1990	276	284	281	294	262	264	367	355	279
SOURCES OF INCOME	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Main income source from government benefits (of all income units)	%	1990	26.6	24.7	28.0	30.6	27.0	33.7	16.3	16.4	26.7
Main income source from government benefits (of married couple with dependants income units)	%	1990	7.9	7.2	8.8	10.9	9.2	16.4	*7.0	*4.2	8.4
Main income source from government benefits (of one parent income units)	%	1990	61.7	58.8	62.8	60.1	67.1	68.8	*53.2	*41.8	61.3
Mean total weekly earnings of all employees	\$	1993	543	532	497	489	511	507	567	609	526
Mean total weekly earnings of full-time adult employees	\$	1993	659	638	605	617	644	618	686	725	641
Mean weekly ordinary time earnings of full-time non-managerial adult employees	\$	1993	565	554	544	549	565	556	596	593	558
Female/male ratio of mean total full-time adult weekly earnings	no.	1993	0.80	0.79	0.81	0.86	0.76	0.84	0.79	0.78	0.80
INCOME SUPPORT	Units	Years	NSW	Vic.	Qld.	SA	WA	Tas.	NT	ACT	Aust.
Aged on age pension	%	1992-93	60.7	62.0	62.2	66.1	60.6	62.3	66.8	45.0	62.7
Age pensioners	'000	1992-93	523.2	387.9	251.6	150.6	121.4	42.0	4.2	10.8	1 515.7
Unemployment beneficiaries	'000	1992-93	302.5	242.2	159.0	79.8	78.5	30.3	12.6	8.9	913.8
Disability support pensioners	'000	1992-93	139.6	94.8	68.5	38.6	36.8	13.3	3.3	3.3	406.6
Sole parent pensioners	'000	1992-93	101.9	65.3	56.9	26.0	29.9	9.8	4.4	4.1	298.4

Income — definitions and references

- Adult employees** — employees aged 21 years or over and employees who, although under 21 years of age, are paid at the full adult rate for their occupation.
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Age pensioners** — the number of age pensioners at 30 June. The figure does not include associated wife's or carer's pensions.
Reference: *Department of Social Security Annual Report*
- Aged on age pension** — the number of age pensioners expressed as a proportion of the aged (men aged 65 years and over and women aged 60 years and over).
Reference: *Estimated Resident Population by Sex and Age: States and Territories of Australia* (3201.0); *Department of Social Security Annual Report*
- Consumer price index (CPI)** — a measure of change over time in the retail price of a constant basket of consumer goods and services. The choice of goods and services is representative of consumption patterns of resident employee households in Australian metropolitan areas. Indexed to 1990 = 100.
Reference: *Consumer Price Index* (6461.0)
- Current usual income** — usual income at time of interview.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)
- Disability support pensioners** — the number of people receiving the disability support pension at 30 June. The figure does not include associated wife's or carer's pensions.
Reference: *Department of Social Security Annual Report*
- Employees** — all wage and salary earners who received pay for any part of the reference period.
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Equivalent income** — current usual income adjusted on the basis of size, composition and labour force status of the income unit, using Henderson equivalence scales.
Reference: *Social Indicators 5* (4101.0)
- Female/male ratio of mean total full-time adult weekly earnings** —
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Full-time employees** — permanent, temporary and casual employees who normally work the agreed or award hours of a full-time employee in their occupation and who received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more a week.
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- GDP(A) per capita** — gross domestic product (GDP) is an aggregate measure of the value of economic production in Australia in a given period. GDP(A) is an average of income, expenditure and production based GDP.
Reference: *Australian National Accounts, National Income, Expenditure and Product* (5204.0)
- GDP spent on income support** — special appropriations under the Social Security Act for income support as a proportion of GDP(I) original.
Reference: *Australian National Accounts: National Income and Expenditure* (5206.0); *Department of Social Security Annual Report*
- Gini coefficient** — an index for measuring inequality of income. The index, always between 0 and 1, is low for populations with relatively equal income distributions and high for populations with relatively unequal distributions.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)
- Gross income** — current usual income received per week at the time of interview, before tax or any other deductions are made.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)
- Gross state product per mean head of population** — a similar measure to GDP per capita but based on state income estimates.
Reference: *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
- Household disposable income per mean head of population** — household income less income tax and other direct taxes, fees, fines etc. charged to persons by the general government, consumer debt interest and transfers overseas, expressed as a value per mean head of population in each state/territory.
Reference: *Australian Economic Indicators* (1350.0); *Australian Demographic Statistics* (3101.0)
- Income unit** — a group of related people who live together and form a single spending unit. Income units can be considered to be analogous to family units with the distinction that non-dependent children and other adults living in the same household are treated as separate income units.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)
- Main income source from government benefits** — income units who received 50% or more of their current usual income from government pensions or benefits.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)
- Managerial employees** — adult managerial, executive and professional staff, generally defined as those employees who do not receive payment for overtime, and/or who are in charge of a significant number of employees in a separate establishment(s).
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Mean total weekly earnings** —
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Mean weekly ordinary time earnings of full-time non-managerial adults** —
Reference: *Distribution and Composition of Employee Earnings and Hours, Australia* (6306.0)
- Median weekly income** — the level of weekly income at which half the income units have higher incomes and half have lower incomes.
Reference: *Survey of Income & Housing Costs and Amenities* (6523.0)

Net income — gross income less personal income tax (including the Medicare levy).
Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Ordinary time — refers to employee's award or standard agreed hours of work. It includes stand-by or reporting time which are part of standard hours of work, and that part of annual leave, paid sick leave and long service leave taken during the reference period.
Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Quintile — twenty per cent groupings of the population when income units are ranked in ascending order according to each income unit's income.
Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Real household disposable income per mean head of population — household disposable income per mean head of population deflated by the implicit price deflator for private final consumption expenditure.
Reference: Australian Economic Indicators (1350.0); Australian Demographic Statistics (3101.0)

Share of gross/net equivalent income going to top/bottom quintile — share of gross/net equivalent income received by the 20% of income units with the highest/lowest incomes.
Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Sole parent pensioners — the number of recipients of the sole parent pension at 30 June. In 1989, the supporting parent benefit and A class widow pensions were combined to form the sole parent pension. Figures prior to 1989 include these two pensions.
Reference: Department of Social Security *Annual Reports*

Unemployment beneficiaries — the number of recipients of unemployment benefit, job search allowance and new start allowance. June monthly average.
Reference: Department of Social Security *Annual Report*

Differences in men's and women's earnings

INCOME DISTRIBUTION

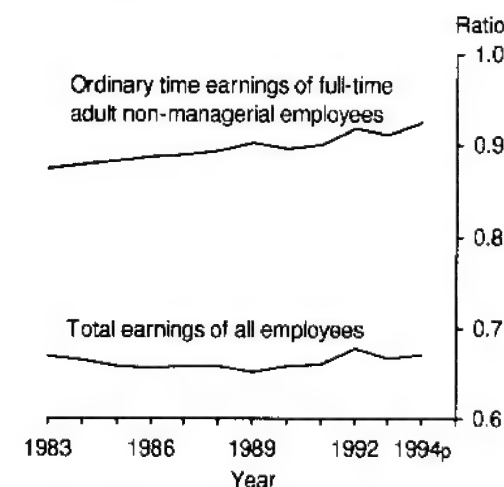
Much of the difference between men's and women's earnings can be explained by the different hours that they work and the sorts of jobs that they do.

In 1969, the Commonwealth Conciliation and Arbitration Commission ruled that by 1972 Australian women should receive equal pay to men for equal work. In the 1980s, two acts, the *Sex Discrimination Act 1984* and the *Affirmative Action (Equal Employment Opportunity for Women) Act 1986*, designed to improve women's situation in the labour market, were passed.

Despite considerable gains since the early 1970s, women in Australia still earn significantly less overall than men. In 1994, the ratio of the average weekly earnings of females and males was 0.67 for all employees and 0.81 for full-time employees. This means that among full-time employees, women earned on average 19% less than men. However, when considering the ordinary time earnings of adult men and women in full-time non-managerial occupations the difference decreases. Women earned 8% less on average than men in 1994 and 13% less on average than men in 1983 (female/male (F/M) earnings ratios of 0.92 and 0.87 respectively).

Many factors contribute to the difference in full-time earnings. These include rates of pay (including overtime payments), occupational and educational differences, age, and employment continuity.

Female/male average weekly earnings ratio^(a)



(a) Ratio of female to male earnings.

Source: Survey of Distribution and Composition of Employee Earnings and Hours

Employees and earnings

Adult employees are employees aged 21 or over or those aged under 21 who are paid at the full adult rate.

Ordinary time earnings are an employee's payment for award, standard or agreed hours of work. They include *over-award* or *over-agreement payments*.

Overtime earnings are payment for hours in excess of award, standard or agreed hours of work.

Total earnings comprise ordinary time and overtime earnings.

Female/male earnings ratio

A common way of comparing the earnings of men and women is to simply divide female earnings by male earnings. The resultant ratio is 1 when the earnings are equal, less than 1 when men earn more than women and greater than 1 when women earn more than men. This ratio can easily be converted to a percentage difference.

Rates of pay

Earnings can include base pay, over-award pay, commissions and bonuses, and overtime. In 1994, female full-time adult non-managerial employees earned on average less per week than their male counterparts from all these components of earnings. The base rate of pay for women was on average 6% less than that of men (F/M earnings ratio of 0.94). Average over-award pay was \$4.80 for women and \$8.70 for men. Average pay by measured results, piecework, bonuses and commission, was \$3.00 a week for women and \$10.50 for men.

Over-award pay and pay by measured result are added to the base rate of pay to make total ordinary time pay. Women earned 8% less total ordinary time pay than men and 6% less base pay than men. Women's lower ordinary time earnings were due to earning less over-award pay and less pay by measured results than men.

On average, in 1994 women earned \$14.10 a week from overtime while men earned \$64.40. Overtime adds to ordinary time earnings to make total earnings. Among full-time adult non-managerial employees

women earned 15% less total average earnings than men (F/M earnings ratio of 0.85).

Occupational segregation

Women tend to concentrate in different occupation groups from men. In 1994, 39% of female full-time employees were clerks, compared to 9% of male full-time employees, 16% were salespersons or personal service workers compared to 9% of men. On the other hand, women were under-represented among managers and administrators (6% compared to 13% of men) and trade occupations (3% compared to 20% of men).

Occupation is often dependent on educational qualifications. In general, better qualified people earn more. Currently, women represent about half of all tertiary graduates and students although there are still considerable differences in the fields of study that men and women choose (see Australian Social Trends 1994 pp. 90-93 *Gender differences in higher education*). These differences can contribute to the occupational segregation of the labour force.

In 1994, in all major occupational groups, men employed full-time had higher average weekly ordinary time earnings than women employed full-time. The least difference between men's and women's earnings was among para-professionals (this group

Average weekly earnings of full-time adult non-managerial employees, 1994_p

Type of pay	Women	Men	Earnings ratio(a)
	\$	\$	ratio
Base pay	535.90	569.40	0.94
Pay by measured result	3.00	10.50	0.29
Over-award pay	4.80	8.70	0.55
<i>Total ordinary time</i>	<i>543.80</i>	<i>588.60</i>	<i>0.92</i>
Overtime	14.10	64.40	0.22
Total earnings	557.90	653.10	0.85

(a) Ratio of female to male earnings.

Source: Survey of Distribution and Composition of Employee Earnings and Hours

includes registered nurses). Female para-professionals earned on average 7% less than their male counterparts (F/M earnings ratio of 0.93). The greatest difference between female and male earnings was among plant and machinery operators, and drivers. In this group women earned on average 23% less than men (F/M earnings ratio of 0.77).

In 1993, among full-time adult non-managerial employees there were only a

Average weekly earnings of full-time adult employees, 1994_p

Major occupation group	Women in occupation group	Full-time average weekly ordinary time earnings		Earnings ratio(a)
		Women	Men	
	%	\$	\$	ratio
Managers and administrators	22.3	719	912	0.79
Professionals	40.8	729	854	0.85
Para-professionals	35.3	659	708	0.93
Tradespersons	6.5	445	542	0.82
Clerks	71.2	512	574	0.89
Sales and personal service workers	50.7	486	594	0.82
Plant and machinery operators, and drivers	9.4	435	565	0.77
Labourers and related workers	23.9	417	478	0.87
All occupations	36.0	562	652	0.86
Standardised for occupation(b)	..	551	652	0.85

(a) Ratio of female to male earnings.

(b) This is the overall full-time average weekly ordinary time earnings men and women would receive if there were equal proportions of men and women in all occupations.

Source: Survey of Distribution and Composition of Employee Earnings and Hours

Average weekly earnings of full-time adult employees, 1994_p

Occupation group	Over-award payments			Overtime		
	Women	Men	Earnings ratio(a)	Women	Men	Earnings ratio(a)
	\$	\$	ratio	\$	\$	ratio
Managers and administrators	4.80	9.80	0.49	2.10	5.40	0.39
Professionals	3.00	5.10	0.59	8.40	17.80	0.47
Para-professionals	0.60	3.60	0.17	12.50	49.00	0.26
Tradespersons	3.60	15.50	0.23	19.10	78.00	0.24
Clerks	6.80	6.30	1.08	9.70	29.20	0.33
Salespersons and personal service workers	3.10	10.20	0.30	16.80	17.30	0.97
Plant and machine operators, and drivers	12.50	8.90	1.40	40.00	122.00	0.33
Labourers and related workers	4.30	7.00	0.61	26.40	69.90	0.38
All occupations	4.70	8.80	0.53	12.60	51.60	0.24

(a) Ratio of female to male earnings.

Source: Survey of Distribution and Composition of Employee Earnings and Hours

few occupations in which women's ordinary time average weekly earnings were at least 5% more than men's. These included counsellors, librarians, home companions and aides, and automobile drivers (all 6%), and forklift and related drivers (10%).

The F/M earnings ratio can be adjusted (standardised) to compensate for the different distribution of men and women across occupation groups. When standardised, the F/M earnings ratio changes little, from 0.86 to 0.85. The overall effect of occupational differences on earnings differences is therefore small. While men are more likely than women to work in higher paying management occupations, they are also more likely than women to work in lower paying occupations (tradespersons; plant and machine operators, and drivers; and labourers and related workers).

In 1994, the average amount of over-award pay and overtime pay that women and men received varied considerably by occupation. Except for clerks and plant and machine operators and drivers, men earned more on average than women from over-award payments. Female plant and machine operators and drivers received 40% more over-award pay and female clerks 8% more than their male counterparts. Women earned less than men from overtime regardless of occupation. This is mainly because men worked more hours overtime than women. Only among salespersons and personal service workers were overtime earnings similar for men and women (a F/M earnings ratio of 0.97). For other occupation groups

women's overtime earnings were considerably less than men's.

Age differences

Some of the difference between women's and men's earnings may be due to the younger age structure of female workers. Women are under-represented in the older, higher paid age groups and over-represented in the younger, lower paid age groups. This is because there were fewer women in the labour force in the past and women have traditionally left the labour force earlier than men.

In 1994, for adult full-time employees, average earnings in their main job increased until about the age of 50 and then declined. However, at all ages, men's average earnings were greater than women's. The smallest difference in average earnings was among those aged 15–19 (F/M earnings ratio of 0.94) and greatest difference among those aged 45–54 (F/M earnings ratio of 0.74).

Educational differences may partly explain the greater difference in earnings between older men and women. In the past, the number of men with tertiary qualifications far exceeded that of women.

The earnings ratio can be standardised to the age structure of all employees. When standardised, the F/M earnings ratio increases from 0.80 to 0.82. This implies that only a small proportion of the overall difference in the main job earnings of full-time adult men and women employees can be attributed to

differences in the age structure of male and female workers.

Continuity of employment

Women must often fit their careers around family responsibilities. This makes them more likely to work part-time than men. They may also have lengthy career breaks which affect their employment continuity and advancement prospects and hence the level they will attain within a particular occupation.

The Survey of Women's Employment Patterns, conducted in Adelaide in 1992, found that 55% of women who had been employed (in Australia) at some time since 1982 had had a break of 3 months or more from employment. 41% of women who said that their most recent change in employment had been a break of 3 months or more had taken the break either for the birth of a child or to care for children or others¹.

Endnotes

- 1 Women's Employment Patterns Adelaide Statistical Division, November 1992 (6215.4).

Full-time employees^(a), 1994

Age group (years)	Average weekly earnings		Age distribution	
	Women	Men	Women	Men
	\$	\$	%	%
15-19	286	305	5.0	3.9
20-24	452	485	19.4	12.3
25-34	567	640	30.0	28.6
35-44	570	744	23.1	27.2
45-54	542	734	18.2	20.0
55-59	507	652	3.3	5.1
60-64	519	617	0.9	2.5
65 +	441*	607	0.2*	0.4
Total	524	655	100.0	100.0

(a) In their main job only.

Source: Survey of Weekly Earnings of Employees (Distribution)

Related ABS publications

- ◆ Distribution and Composition of Employee Earnings and Hours - Australia Preliminary (6305.0)
- ◆ Weekly Earnings of Employees (Distribution) (6310.0)

Women's contribution to couple earnings

INCOME DISTRIBUTION

In 1994 women contributed, on average, 35% of the earnings of couples with children. When both partners worked full-time, women contributed 43%.

The proportion of couples with dependent children with both partners employed increased from 42% in 1984 to 53% in 1994 (see *Family — national summary table p. 26*). Factors contributing to this change include a move away from traditional views of women's roles; legislation for equal employment opportunity and pay; the availability and acceptability of child care; economic pressures, such as periods of high inflation and high housing interest; and the desire for a higher standard of living.

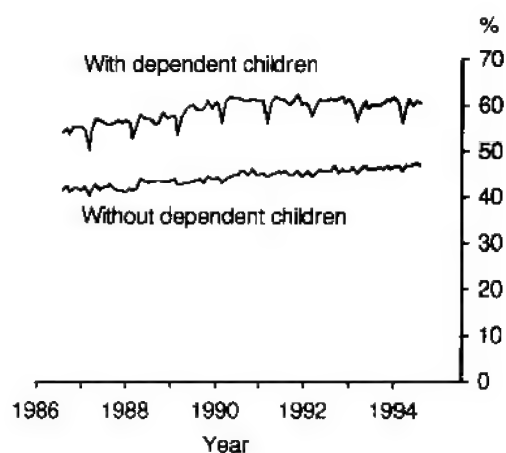
Between 1987 and 1994, the period on which this review is based, the labour force participation rate of women rose from 49% to 52% (see *Work — national summary table p. 86*). The participation rate for married women with dependent children rose from about 56% to 61%. In 1994, this rate was 14 percentage points higher than the labour force participation rate of married women without dependent children. This latter group includes retired women. The labour force participation rate of married women with dependent children varies depending on the season. For example, it regularly drops by about 4 percentage points over Christmas holiday periods. The participation rate of married women without children is less influenced by seasonal factors.

In 1994, among couples with dependent children where both partners were employees, the most common working arrangement (55%) was for the husband to work full-time and the wife to work part-time. In 42% of couples both partners were employed full-time. In the remaining 3% of couples the husband was a part-time employee. In contrast, among couples without dependent children where both

Couple earnings

Couple earnings is the sum of a husband's and wife's total weekly earnings. In most cases it approximates the family's total income from earnings even though earnings of other family members are excluded. This review uses earnings data of employees to show the contribution women make to family earnings and is therefore confined to those couples where both partners are employees. Earnings are the major contributor to family income. However, they are not the only possible source of income so the review does not present a complete picture of family income.

Labour force participation of married women



Source: Labour Force Survey

Employment status of couples where both partners were employees, 1994

Employment status of wife	With dependent children			Without dependent children		
	Husband full-time	Husband part-time	Total	Husband full-time	Husband part-time	Total
	'000	'000	'000	'000	'000	'000
Full-time	320.0	12.2	332.2	382.0	15.0	397.0
Part-time	416.3	11.3	427.6	152.0	14.7	166.6
Total	736.3	23.6	759.9	534.0	29.7	563.7

Source: Weekly Earnings of Employees (Distribution)

Wife's average contribution to couple earnings where the husband was a full-time employee

Couple type	1987 — wife employed		1994 — wife employed	
	Full-time	Part-time	Full-time	Part-time
	%	%	%	%
Couple with dependent child(ren) aged less than 15 years only	43.7	27.5	44.3	27.6
Couple with dependent children aged less than 15 years and 15 years or more	42.5	27.6	41.8	24.5
Couple with dependent child(ren) aged 15 years or more only	42.0	28.0	40.8	27.4
All employed couples with dependent children	43.1	27.5	43.1	27.1

Source: Weekly Earnings of Employees (Distribution)

partners were employees, the most common working arrangement (68%) was for both partners to work full-time. These proportions were similar in 1987.

Married women's earnings

In 1994, women in couples with dependent children in which both partners were full-time employees contributed 43% of the couple's earnings. The contribution varied according to the age of the children. Women with dependent children only aged under 15 made the highest contribution (44%). Those with children only aged over 15 contributed 41% of the couple's earnings. In comparison, women aged 15–39 who had no dependent

children contributed 46% of the couple's earnings.

In couples with dependent children in which the husband was a full-time employee and the wife was a part-time employee, the average contribution of women to the couple's earnings was 27%. Among these couples, women with dependent children both under and over 15 years of age had the lowest contribution (24%). Women aged 15–39 who had no dependent children made a higher average contribution (32%) than those with dependent children. There was little change in the contributions of married women to couple earnings between 1987 and 1994.

Employment status of couples where both partners were employees, 1994

Employment status of partners	Quintiles for couple's weekly earnings					Total
	Less than \$761	\$761–\$960	\$961–\$1,120	\$1,121–\$1,400	More than \$1,400	
	%	%	%	%	%	%
With dependent children						
Both partners full-time employees	10.0	18.0	17.3	25.2	29.4	100.0
Husband full-time, wife part-time	27.7	24.8	17.5	18.5	11.5	100.0
Husband part-time, wife full/part-time	55.9	22.5	4.5*	7.1*	10.0*	100.0
All couples with dependent children	21.1	21.9	17.0	21.0	19.0	100.0
Without dependent children						
Both partners full-time employees	9.6	20.1	21.7	24.8	23.8	100.0
Husband full-time, wife part-time	39.2	25.1	15.6	12.2	7.9	100.0
Husband part-time, wife full/part-time	66.1	19.4	7.3*	3.8*	**	100.0
All couples without dependent children	20.6	21.4	19.3	20.3	18.4	100.0

Source: Weekly Earnings of Employees (Distribution)

Married women's average contribution to couple earnings among couples where both partners were employees, 1994

Couple type	Quintiles for couple's weekly earnings					Total
	Less than \$761	\$761–\$960	\$961–\$1,120	\$1,121–\$1,400	More than \$1,400	
	%	%	%	%	%	%
Couple with dependent child(ren) aged less than 15 years only	32.6	35.3	34.3	37.3	35.9	35.4
Couple with dependent children aged less than 15 years and 15 years or more	33.4	33.4	35.5	36.3	30.4	33.5
Couple with dependent child(ren) aged 15 years or more only	39.4	38.9	39.5	34.8	35.2	36.6
All employed couples with dependent children	33.7	35.5	35.3	36.7	34.9	35.4

Source: Weekly Earnings of Employees (Distribution)

Low and high couple earnings

The earnings of couples are directly related to their working arrangements. In 1994, 55% of couples with dependent children in which both partners were full-time employees had couple earnings over \$1,120 per week. This put these couples in the top 40% of couples in terms of couple earnings. 49% of couples without dependent children in which both partners were employees were in the top 40% of couples in terms of couple earnings.

53% of couples with dependent children in which the husband was a full-time employee and the wife was a part-time employee had couple earnings that placed them in the bottom 40% of couples. Among similar couples without dependent children 64% had couple earnings that placed them in the bottom 40% of couples. Couples in which the husband was a part-time employee were the most likely to have couple earnings that fell in the bottom 40% of couples, 78% of those with dependent children and 86% of those without dependent children.

Overall, the average contributions that women made to couple earnings were similar across the couple earnings quintiles, the contributions only varying by about 3 percentage points. In couples with dependent children and couple earnings under \$761 per week (the lowest quintile), women contributed 34% of the couple's earnings. In couples with dependent children and couple earnings of more than \$1,400 (the highest quintile) women contributed 35%. Women in couples with dependent children aged less than 15 and more than 15 who were in the highest couple earnings quintile had the smallest average contribution to couple earnings (30%).

The contributions made to couple earnings by married women aged 15–39 in couples without dependent children were also similar across the quintiles. The figures were close to their overall contribution of 44%.

The small variation in contributions that married women made to couple earnings across the quintile ranges indicates that, when married women are working, their incomes tend to increase in proportion to their husbands' incomes.

Related ABS publications

- ◆ Weekly Earnings of Employees (Distribution), Australia, 1994 (6203.0)

The value of unpaid work

INCOME DISTRIBUTION

The estimated value of the 18 billion hours of unpaid work performed in 1992 was \$228 billion. Women contributed 65% of this.

In 1992, total unpaid work in Australia was estimated to be worth \$228 billion. This was equivalent to 58% of the value of the gross domestic product in 1992. Over the year, 18 billion hours of unpaid work were performed compared to 16 billion hours of paid work. Currently, unpaid work is excluded from Australia's system of national accounts but the ABS supports its inclusion in a system of satellite accounts (separate accounting statements that are consistent with the core national accounts).

Why measure unpaid work?

Unpaid work fulfils many important functions that directly affect well-being and quality of life in a household. Households generally need the input of both paid and unpaid work. Consequently, the way in which households fulfil these functions can lead to relative advantages and disadvantages. For example, if two similar households have the same income but one has only one member in paid work and the other has two, the first household has an economic and social advantage because a member is free to make the unpaid contribution to the household economy.

Unpaid work

Work is generally defined as activity that uses labour and other factors of production to produce goods and services for sale in the market. *Unpaid work* receives no payment as the majority of the services are not produced for the market. There are, therefore, no appropriate monetary prices to use in the valuation of these services. Accordingly, the 1993 System of National Accounts excludes the value of unpaid work from its definition of economic production as it aims to measure only market activity and activity for which satisfactory near market values exist.

A widely accepted principle for determining the scope of total unpaid work is the 'third person criterion'. That is, if an activity could be carried out by paying someone to perform the service, eg cleaning or child care, then the activity can be classed as unpaid work.

Total unpaid work comprises unpaid household work (domestic activities, child care and purchasing goods and services) and volunteer and community work.

Who does unpaid work?

Overall, women did most of the unpaid work in Australia in 1992. Women spent, on average, 20% of their daily time doing unpaid household work, double the time men spent.

Women contributed 88% of the value of work done on laundry, ironing and clothes care,

Distribution of time spent on unpaid household work, 1992

Activity	Women		Men		Total
	Employed	Not employed	Employed	Not employed	
	%	%	%	%	%
Food and drink preparation and clean up	27.4	47.2	13.8	11.6	100.0
Laundry, ironing and clothes care	37.4	51.0	6.8	4.8	100.0
Other housework	31.5	50.6	9.0	8.9	100.0
Gardening, lawn care and pool care	12.0	25.9	30.0	32.1	100.0
Pet, animal care	22.6	34.3	22.7	20.4	100.0
Home maintenance, improvement and car care	8.3	8.3	49.5	33.9	100.0
Household paperwork etc.	24.2	28.5	28.4	18.9	100.0
Transport and associated travel	32.7	26.9	25.9	14.5	100.0
Child care	31.1	46.5	17.7	4.7	100.0
Purchasing and associated travel	28.2	33.2	22.0	16.6	100.0

Source: Time Use Survey

and 82% of the value of work done on house cleaning. Men, however, made the greatest contribution to the value of unpaid work done on home maintenance, improvement and car care; and gardening, lawn care and pool care (83% and 62% respectively).

Trends

Between 1984 and 1994 the proportion of women participating in the labour force has increased from 45% to 52% (see *Work — national summary table* p. 86). Over the same period the proportion of couples with dependent children and both partners in paid work has increased from 42% to 53% (see *Family — national summary table* p. 26). In couple families where both partners are in paid work, women do less unpaid work than in couple families where only one partner is in paid work. Women who spend 40 hours a week in paid work do about five and a half hours a week less unpaid work than women not in paid work. This reduction is not because other household members increase their amount of unpaid work once a woman moves into the labour force. Therefore, either less unpaid work is being done or market substitutions have been made, for example, in the areas of child care, cleaning, ironing, meals out etc. Future Time Use Surveys will determine if the tendency for some households to replace tasks previously carried out as unpaid work with paid market replacements is increasing.

For more information on unpaid work see Australian Social Trends 1994 pp. 120–125 *Unpaid household work*.

How can unpaid work be valued?

The ABS has adopted *individual function replacement cost* as the method of estimating the total value of unpaid work in Australia. This method assigns values to the time spent on unpaid work according to what it would cost to pay someone else to do the job. For example, time spent on cleaning is valued using a rate of pay for commercial cleaning and time spent on child minding is valued according to the rate of pay for child care workers. This method assumes that household members and market replacements are equally productive.

Further estimates of the value of total unpaid work for Australia will be compiled when data from the proposed 1997 Time Use Survey become available.

The value of unpaid work

Using the individual function replacement cost method, the total value of unpaid work was estimated to be \$227.8 billion in 1992. Unpaid household work, worth \$209.7 billion, accounted for most of the total value. Volunteer and community work made up the remaining \$18.1 billion.

Married women contributed 49% of the estimated value of unpaid household work and married men contributed a further 25%. Men and women contributed almost equally to unpaid volunteer and community work, although women not in paid employment and men in paid employment made a marginally greater contribution.

Estimated unpaid work, 1992

Unpaid work	Women		Men		Total
	Employed	Not employed	Employed	Not employed	
	\$ billion	\$ billion	\$ billion	\$ billion	\$ billion
<i>Unpaid household work</i>	56.9	82.5	40.3	30.0	209.7
Married	44.7	58.2	31.9	21.1	155.9
Not married	12.2	24.3	8.4	8.9	53.8
Volunteer and community work	4.0	5.3	4.6	4.2	18.1
Total	60.9	87.8	44.9	34.2	227.8

(a) Estimated using individual function replacement cost method.

Source: Unpaid Work and the Australian Economy

Related ABS publications

- Occasional Paper: Unpaid Work and the Australian Economy, 1992 (5240.0)

Superannuation: who will pay for the future?

SOURCES OF INCOME

Despite increasing superannuation coverage among Australians, most people do not contribute enough to provide them with an adequate retirement income.

Most Australians currently rely on the age pension to support them during their retirement. The retired population is increasing in size. The Australian population aged 65 and over is expected to nearly double by 2041 (see Australian Social Trends 1994 pp. 27-29 *Projections of the aged population*). In addition, people are living longer in retirement as life expectancies continue to increase (see *Life expectancy trends* pp. 51-54). Because of these two factors there are concerns about the ability of the pension system to provide adequate future financial support for retired people.

In response the government has introduced incentives to encourage people to take greater responsibility in providing income for their retirement. Currently, most people hold their assets in the form of housing and consumer durables. These do not readily provide a retirement income¹. Informing people about their superannuation requirements, and introducing compulsory superannuation and the superannuation guarantee charge (SGC), are two strategies that the government has implemented to increase national savings.

The aim is to eventually make retired people independent of the age pension. Although the age pension will still be available, it will be a safety net complementing superannuation, which will be the main source of retirement income².

Superannuation and employment

People have *superannuation coverage* if they belong to a superannuation scheme towards which either they or their employer/business are making contributions. A *superannuation scheme* is any fund, association or organisation set up for the purpose of providing financial cover for members when they retire from full-time work. Overseas superannuation funds are excluded.

Employed people are those aged 15 and over who worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

Employees are employed people who worked for an employer for wages or salary or in their own business, either with or without employees, if that business was a limited liability company.

Increasing coverage

Superannuation coverage of the population is increasing. Between 1988 and 1993, the proportion of people aged 15-74 with superannuation coverage increased from 34% to 51%. The increase was more marked for women than for men.

The proportion of employed people covered by superannuation increased from 51% to 80%. The superannuation coverage of people employed part-time increased more rapidly than that of people employed full-time. In 1988, people employed full-time were three times more likely to have superannuation

Superannuation coverage^(a)

Labour force status	1988			1993		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
Employed	61.2	36.5	51.3	82.1	78.2	80.5
Full-time	63.5	46.8	58.3	85.4	87.0	85.9
Part-time	20.4	19.0	19.3	45.4	65.5	61.0
Unemployed	3.2	2.2*	2.7	4.6	3.6	4.2
Not in the labour force	1.8	1.5	1.6	2.1	2.5	2.4
Total	47.5	19.6	33.6	59.5	42.2	50.8

(a) People aged 15-74 years.

Source: Superannuation Survey

coverage than people employed part-time, 58% compared to 19%. By 1993 the difference was considerably smaller, 86% compared to 61%. Superannuation coverage of people who were unemployed or not in the labour force was very low in both 1988 and 1993, although a slight increase occurred during the period.

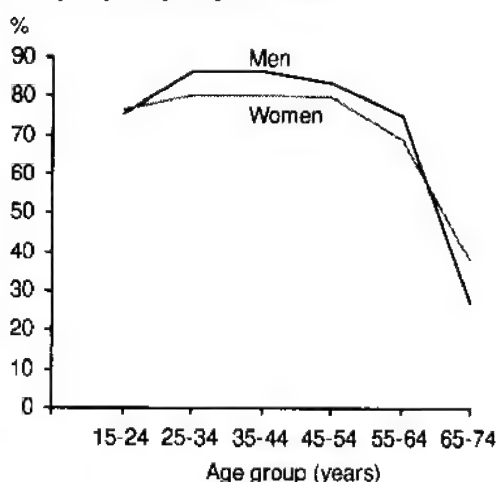
Coverage of employed people

In 1993 employees were more than twice as likely to have superannuation coverage as self-employed people, 89% compared to 36%. One reason is that self-employed people may be out of the scope of compulsory superannuation legislation.

Among those employed part-time, women had much higher coverage than men, 65% compared to 45%. Among people employed full-time, women also had a slightly higher rate of superannuation coverage than men, 87% compared to 85%. However, overall, employed men had higher rates of superannuation coverage than women. This is because a large proportion of women (42%) but only a small proportion of men (8%) work part-time.

In 1993 the superannuation coverage of employed people was highest among those aged 25–34 and 35–44 (84%). This was the case for both men and women. Coverage was lowest among people aged 65–74, followed by those aged 15–24. This may be due to higher proportions of part-time workers in these age groups. These were also the only two age groups where women had higher rates of superannuation coverage than men.

Superannuation coverage of employed people, 1993



Source: Superannuation Survey

Industry and coverage

In 1993 rates of superannuation coverage varied widely according to industry of employment. People employed in industries that had high public sector involvement had higher rates of superannuation coverage than those employed in other industries. People employed in electricity, gas and water, and communication had the highest rates of superannuation coverage, 98%, followed by public administration and defence, 96%.

People working in the agriculture, forestry, fishing and hunting industry had the lowest superannuation coverage (49%). This reflects the high proportion of self-employed people in this industry. People who worked in the recreation, personal and other services industry also had low rates of superannuation coverage (65%). This is likely to be due to the high numbers of part-time workers in this industry.

Superannuation contributions

In 1993, 4 in 5 employed Australians had superannuation coverage. However, this does not reflect whether adequate contributions were being made. The Fitzgerald report² recommends that people contribute around 18% of their earnings to be completely independent from the age pension during

Superannuation coverage by industry, 1993

Industry	Men	Women	Persons
	%	%	%
Electricity, gas & water	98.1	96.4	97.9
Communication	98.8	95.6	97.8
Public administration & defence	97.8	92.3	95.5
Mining	93.9	81.6	92.7
Manufacturing	91.9	83.6	89.7
Community services	88.4	87.6	87.9
Finance, property & business services	83.9	84.8	84.4
Transport and storage	83.8	77.4	82.3
Wholesale & retail trade	79.1	69.7	75.1
Construction	73.2	55.9	70.7
Recreation, personal & other services	64.9	64.3	64.5
Agriculture, forestry, fishing & hunting	53.0	39.4	48.9
Total	82.1	78.2	80.5

Source: Superannuation Survey

retirement. The Superannuation Guarantee Charge requires that employers contribute a minimum of 3% of their employees' earnings to a superannuation scheme, however some employers may contribute more than 3%. It is the responsibility of the individual to meet the gap between the SGC and the recommended contribution.

Overall, contributions being made by employees in Australia in 1993 were not sufficient for people to be independent of the age pension. An employed person would need to contribute at least 15% of their earnings in conjunction with the SGC contribution of 3% made by their employer to be independent of the age pension in retirement. In 1993, just over 1% of all employees with superannuation coverage made personal contributions of 15% of their earnings or more.

In 1993, only half of all employees covered by a superannuation scheme made personal contributions to that scheme. Of these people, one-quarter contributed less than 3% of their earnings. Only 3% contributed 15% or more of their earnings to their superannuation scheme.

Full-time employees were more likely to make personal contributions to their superannuation scheme than part-time employees, 55% compared to 25%. However, among those employees who made personal contributions, part-time employees contributed more of their earnings than full-time employees. 9% of these part-time employees contributed 15% or more of their

The Superannuation Guarantee Charge

The government introduced the *Superannuation Guarantee Charge* (SGC) in 1992 as part of its retirement income policy. The main aim of the policy in the long term is to make most Australians independent of the age pension.

The SGC is a taxation charge on employers who do not satisfy the prescribed minimum standard of employer contributions to superannuation. In 1992, the prescribed minimum standard contribution under the SGC Bill was 3%. By 2002-03, the SGC Bill requires employers to contribute at least 9% of employees' earnings to a superannuation scheme. The dollar value of the SGC is equivalent to the cost of the prescribed minimum standard. However, paying the charge is less attractive than meeting the standard because the charge is non-deductible for income tax purposes.

earnings to a superannuation scheme compared to 2% of full-time employees.

Of all employees who had superannuation coverage, men were more likely to make personal contributions than women, 56% compared to 41%. However, among these people, women were slightly more likely to contribute 15% or more of their earnings than men, 3% compared to 2%. This may be due to higher proportions of women working part-time and these women being able to make larger contributions because they are financially supported by their partner³.

Personal contributions of employees aged 15-74 years with superannuation coverage, 1993

Personal superannuation contributions	Men		Women		All employees		
	Full-time worker	Part-time worker	Full-time worker	Part-time worker	Full-time worker	Part-time worker	Total
	%	%	%	%	%	%	%
Under 3%	25.8	27.7	24.8	21.2	25.5	22.2	25.2
3% to under 5%	32.3	21.6	32.6	19.7	32.4	19.9	31.3
5% to under 10%	35.3	26.9	37.1	40.2	35.8	38.2	36.0
10% to under 15%	4.4	8.6	4.2	10.5	4.3	10.2	4.8
15% & over	2.2	15.2	1.3	8.4	1.9	9.4	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% of people with coverage who made personal contributions							
	57.7	25.4	48.9	25.4	54.7	25.4	49.7

Source: Superannuation Survey

Whether employees make personal contributions also varies with age. In 1993, 59% of employees aged 45–54 made personal contributions to their superannuation scheme compared to 27% of those aged 15–24. People are more likely to make personal contributions later in life as disposable income increases and financial priorities change from family and home to retirement².

Main income source in retirement

Before the SGC, superannuation schemes have had limited coverage and adequacy. In 1992, 43% of people who had retired from full-time work aged 45 and over reported that they had superannuation cover at retirement, but only 11% stated that superannuation had been their main source of income at retirement. 44% stated that government benefits were their main source of income at retirement (see Australian Social Trends 1994 pp. 143–146 *Retirement income*).

However, there are indications that this situation is changing. In 1993, 48% of employees aged 45–74 who made personal contributions to a superannuation scheme expected superannuation to be their main source of income in retirement. 24% of these people expected some form of pension to be their main source of income in retirement.

Intended use of lump sum payment

In 1992, 61% of people aged 45 and over who intended to retire and were in a superannuation scheme expected to receive a lump sum payment at retirement. Over half (55%) of these people intended to invest their payment to produce genuine income returns. 24% had not decided what they would do with their payment.

Of the remaining people, the majority intended to use their lump sum to pay off their home, pay for home improvements or buy a new home. This was followed by pay for a holiday, clear outstanding debts or buy or pay off a car/vehicle. Using a lump sum payment in this way may allow people to live on a smaller income during their retirement. However, it is of concern to policy makers because the aim of superannuation is to save for retirement. If people use their superannuation payments to pay off debts, they may not be able to provide themselves with retirement income, and they may become dependent on the age pension as their main source of retirement income.

Endnotes

- 1 Gallagher, P. (1993) *Retirement Income Modelling & Policy Development in Australia* Conference Paper prepared for the Economic Modelling Bureau of Australia Conference on the Asia-Pacific Economy.
- 2 Fitzgerald, V.W. (1993) *National Saving: A report to the Treasurer*.
- 3 Welling, M. (1993) *Superfunds*.

Related ABS publications

- ◆ Superannuation Australia, November 1993 (6319.0)
- ◆ Retirement and Retirement Intentions, Australia, October 1992 (6238.0)

Purchasing power

EXPENDITURE

Between 1974 and 1994, on average, prices increased 4.5 times. In the same period, disposable household incomes increased 5.5 times.

Goods and services cost more than ever before. However while prices have increased, incomes have generally increased faster. A person on the average wage can buy more now than 20 years ago. Despite the increase in prices, and the associated decrease in the purchasing power of money, people's purchasing power has increased.

Price increases

In 1974 the average cost of a litre of milk in Sydney was 30c compared to \$1.03 in 1994. Over the same period the average price of 1kg of rump steak in Sydney increased from \$3.24 to \$12.62. Overall, an average basket of goods and services that cost \$100 in 1974 would have cost \$449 in 1994.

In 1974 a jar of jam was the cheapest of the selected items but by 1994 it was the third most expensive. Over this period the price of jam increased 8.4 times, compared to the price of the average basket of goods and services increasing 4.5 times. Part of this difference may be accounted for in the change in the quality of jam over this period.

Average retail prices of selected goods, Sydney

Item(a)	1974	1984	1994
	\$	\$	\$
1 litre milk	0.30	0.68	1.03
500g butter	0.68	1.59	1.68
680g loaf of white bread	0.24	0.89	1.67
1kg rump steak	3.24	7.64	12.62
1kg sausages	0.98	2.47	3.51
1kg onions	0.43	1.01	1.16
825g tin of peaches	0.40	1.10	1.92
1 dozen 55g eggs	0.84	1.54	1.91
2kg white sugar	0.47	1.30	2.04
500g jar of jam	0.28	1.30	2.32
250g tea	0.36	1.36	1.82

(a) Item prices in 1974 and 1984 have been adjusted to reflect the quantity of the equivalent product sold in 1994. Some items have changed slightly in nature, and so are not directly comparable.

Source: Average Retail Prices (annual averages)

Purchasing power

Purchasing power is the amount of goods and services that can be bought with a given amount of money. Increasing prices reduce the purchasing power of money.

The consumer price index (CPI) measures changes in the price of a basket of goods and services which reflects the buying patterns of an average employee household in an average Australian capital city. The CPI does not accurately reflect the change in the cost of goods and services for any individual or household, either within the CPI population group or outside it.

The CPI basket of goods and services is only representative of items bought by employee households in capital cities and not the whole population. Pensioners, for example, would be expected to have a different average basket of goods and services. However, studies have shown that average price changes in their basket have been broadly similar to those for the CPI basket.

Because the spending patterns of people change, it is important to revise the basket of goods and services periodically so it reflects the current expenditure patterns of the CPI population group. The basket of goods and services was revised most recently in 1992.

As well as revisions to the items within the basket of goods and services, some items change in quality over time. For example, a standard loaf of bread in 1974 was a 2lb home delivered unsliced white loaf. In 1994 it was a 680g sliced white loaf sold in a supermarket. The statisticians responsible for the price index evaluate the effects of quality change separately from price change.

Between 1974 and 1984, all of the selected items, except eggs, more than doubled in price, with jam increasing 4.7 times, and bread increasing 3.6 times. However, between 1984 and 1994 the increase in prices was much slower. None of the selected items doubled in price, and butter only increased in price by 5%. This pattern reflects the general increase in the CPI over these periods. Between 1974 and 1984 the CPI increased 2.7 times, while in the next ten years it increased only 1.7 times.

Increase in average prices 1974-94

Goods and services with the fastest increase in price	Increase	Goods and services with the slowest increase in price	Increase
	ratio		ratio
Cigarettes & tobacco	10.0	Poultry	2.0
Government owned dwelling rents	9.4	Appliances	2.2
Local government rates & charges	7.1	Postal & telephone services	3.0
Health services	6.4	Pork	3.3
Hairdressing services	6.0	Lamb & mutton	3.3
Urban transport fares	5.9	Men's & boys' clothing	3.7
Dry cleaning & shoe repairs	5.9	Footwear	3.8
Consumer price index	4.5	Consumer price index	4.5

Source: Consumer Price Index (annual averages)

Variation between goods

Although the overall price of an average basket of goods and services has increased 4.5 times in the last 20 years, the prices of different components of that basket have increased at different rates. The average price of cigarettes and tobacco increased more than ten times. The rapid increase in the cost of cigarettes and tobacco mainly reflects increased government charges. Rent paid on government owned dwellings increased nearly ten times, more than twice the rate of the CPI, mainly due to the decrease in government subsidies for public housing.

Between 1974 and 1994, the price of poultry and household appliances increased at less than half the rate of the average basket of goods and services, reflecting the changes in the production and distribution of these goods.

Regional differences

Prices vary between cities. For example, in 1994 leaded petrol was cheapest in Brisbane. At an average of 60.8c per litre it was 7.2c per litre cheaper than the next cheapest capital city (Sydney). Rump steak was most expensive in Darwin (\$12.69/kg) and Sydney (\$12.62/kg), and cheapest in Perth (\$10.56) and Melbourne (\$10.98). At \$1.54/kg the price of oranges in Sydney was nearly twice the price in Canberra (78c/kg).

These price differences reflect average prices in 1994. While the differences may fluctuate in the short-term, the overall increase in prices is very similar between the capital cities. Between June quarter 1974 and June quarter 1994 prices in Adelaide increased 4.7 times, only 3% higher than the national average. In Brisbane prices increased 2% less than the national average.

Average retail prices of selected goods, 1994

Capital city	1 litre petrol(a)	1 loaf bread	1 litre milk	1kg rump steak	1kg laundry detergent	1kg oranges
	cents	\$	\$	\$	\$	\$
Sydney	68.0	1.67	1.03	12.62	4.41	1.54
Melbourne	68.9	1.55	1.05	10.98	4.48	1.18
Brisbane	60.8	1.47	1.06	11.43	4.71	1.11
Adelaide	70.5	1.25	0.99	11.43	4.34	0.82
Perth	69.0	1.34	1.05	10.56	4.65	1.46
Hobart	75.2	1.55	1.12	11.08	5.01	0.99
Darwin	73.1	1.71	0.95	12.69	4.87	1.45
Canberra	71.7	1.68	1.07	11.11	4.48	0.78

(a) Leaded petrol.

Source: Average Retail Prices (annual averages)

Earnings and disposable income

Average male earnings is the average wages and salaries received by men employed either part-time or full-time. It includes ordinary time and overtime earnings. Male earnings have been used in this review because comparable data for female earnings are not available in a long time series.

Disposable income per capita is the total household income less income tax, other direct taxes, fees, fines etc., consumer debt interest and unrequited transfers to overseas as estimated in the national accounts, divided by the total estimated resident population. This represents the average amount of money a person has available to spend on goods and services.

Income

While the price of the average basket of goods and services increased 4.5 times between 1974 and 1994, average full-time male earnings increased 13% more. Disposable income per capita increased 5.5 times (22% more than the CPI). The difference between the increase in male earnings and disposable income per capita is largely due to the increasing number of women in paid employment and the closing of the gap between men's and women's earnings (see *Differences in men's and women's earnings* pp. 111-114). Over this period unemployment benefits increased 26% more than the CPI and the aged pension increased 36% more. This rapid growth reflects the changes in the way increases in social security payments are calculated (see Australian Social Trends 1994 pp.147-153 *Social security transfer payments*).

Value of weekly incomes

Income	1974	1994	Increase
	\$	\$	ratio
Average male earnings(a)	133	658	4.9
Disposable income per capita	56	305p	5.5
Aged pension	26	159	6.1
Unemployment benefit	26	147	5.7

(a) Average ordinary time full-time male earnings

Source: Average Weekly Earnings; Australian National Accounts: National Income, Expenditure and Product; Estimated Resident Population; Department of Social Security *Annual Report*

International comparison

Overall, in 1990 the prices of goods and services in Australia were very similar to those in other OECD countries. Average OECD prices were only 1% higher than Australian prices.

Of the countries selected, Japan had the highest prices, 27% higher than in Australia. However, incomes were also higher in Japan than in Australia. The price of bread in Japan was almost double the price in Australia. This reflects the cultural and dietary differences between the two countries.

New Zealand and the United States had, on average, the lowest prices, 13% and 11% lower than Australian prices respectively.

The overall price levels in Australia were similar to those in Canada and Italy (which were 2% higher), and the UK (4% lower). However within this overall picture, there was significant variation in prices. In Italy clothing was less than half the price it was in Australia, but rent and water charges were 50% higher.

Relative price levels in selected OECD countries, 1990

Country	Bread	Rent(a)	Clothing	Total(b)
NZ	97	93	80	87
USA	101	79	93	89
UK	110	101	75	96
Australia	100	100	100	100
Canada	121	104	101	102
Italy	136	149	46	102
France	139	165	74	109
Germany	134	144	103	113
Japan	199	121	120	127
OECD	130	106	84	101

(a) Gross rent and water charges.

(b) The basket of goods and services in each country reflects the purchasing patterns of the entire population in that country, not just the CPI population group.

Source: Gross Domestic Product at Purchasing Power Parity in OECD Countries (5226.0)

Purchasing power of earnings

The time it took a person on the average male wage to purchase an average basket of goods and services decreased by 9% overall between 1974 and 1994. However, the change in the amount of time a person had to work to earn enough to buy specific items varied according to the item.

Between 1974 and 1994 the time it took at average male earnings to earn enough to buy a dozen eggs fell by 54% to 7 minutes. Butter also became much more affordable over this period. The length of time it took to earn enough to buy a loaf of bread increased by 38%, and the time it took to earn enough for a jar of jam increased by 71%. Tea and tinned peaches were about as affordable in 1994 as in 1974.

Related ABS publications

- ◆ Consumer Price Index (6401.0)
- ◆ Average Retail Prices of Selected Items, Eight Capital Cities (6403.0)

Minutes of work, at average male wage, to pay for selected items^(a)

Item	1974 ^(b)	1994	Change
	mins	mins	%
1 litre milk	5	4	-29.8
500g butter	12	6	-49.9
680g loaf of white bread	4	6	37.9
1kg rump steak	58	46	-21.0
1kg sausages	18	13	-27.4
1kg onions	8	4	-45.2
825g tin of peaches	7	7	-2.0
1 dozen eggs	15	7	-53.8
1kg white sugar	8	7	-12.6
500g jar of jam	5	8	71.0
250g tea	6	7	2.9

(a) At Sydney prices.

(b) Item prices in 1974 have been adjusted to reflect the quantity of the equivalent product in 1994.

Source: Consumer Price Index; Average Weekly Earnings; Labour Force Survey

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Most Australian homes have brick walls and at least three bedrooms, and are heated by electricity or mains gas.

Safe as houses?..... 136

In 1993, over half a million households were victims of household crime. 62% of these households were not members of neighbourhood or rural watch.

Investment in residential rental property..... 139

In 1993, three-quarters of a million people were investors in residential rental property. 78% of these people invested in only one rental property.

HOUSING COSTS

Low income private renters..... 143

In 1990, low income private renter families spent 36% of their incomes on rent. By 1994, this had increased to 42%.

Housing — national summary

6591

HOUSING STOCK		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Dwellings	'000		n.a.	n.a.	5 900	n.a.	5 556	n.a.	6 148	n.a.	6 322	n.a.	6 678
Houses (of dwellings)	%		n.a.	n.a.	77.8	n.a.	80.8	n.a.	80.7	n.a.	78.2	n.a.	79.4
Flats and apartments (of dwellings)	%		n.a.	n.a.	9.7	n.a.	9.0	n.a.	11.5	n.a.	n.a.	n.a.	12.5
Owned (of dwellings)	%		n.a.	n.a.	36.7	n.a.	43.0	n.a.	42.4	n.a.	41.6	n.a.	41.8
Being purchased (of dwellings)	%		n.a.	n.a.	30.7	n.a.	29.4	n.a.	29.2	n.a.	27.6	n.a.	28.3
Public rental (of dwellings)	%		n.a.	n.a.	5.1	n.a.	5.5	n.a.	5.8	n.a.	5.6	n.a.	6.2
Size of new private sector houses	m ²		167	170	178	182	186	198	189	188	187	189	192
Size of new public sector houses	m ²		98	104	108	111	114	114	110	121	122	130	141
Private sector dwellings	'000		110.7	129.1	126.5	106.2	107.7	139.4	147.5	122.9	123.0	144.8	157.3
Public sector dwellings completed	'000		13.1	13.3	13.9	13.6	10.7	11.0	12.5	11.5	9.7	11.1	9.9
HOUSING COSTS		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Housing interest rate	%		11.8	11.6	13.8	15.5	14.2	15.3	16.9	15.1	11.9	9.9	8.9
Affordability index	no.		n.a.	n.a.	141.1	135.1	135.1	110.1	100.9	111.7	133.9	152.1	162.8
Average weekly earnings index	no.		67.1	72.2	76.7	82.2	87.2	93.5	100.0	106.6	111.5	113.5	116.9
Private rental index	no.		58.2	62.5	68.6	75.7	83.7	92.7	100.0	104.7	106.3	106.7	107.1
Public rental index	no.		56.1	61.4	67.9	74.0	85.1	94.5	100.0	105.0	110.0	112.5	115.3
Project home price index	no.		n.a.	n.a.	n.a.	71.9	77.1	91.4	100.0	102.1	102.1	103.0	105.8
Materials used in house building price index	no.		n.a.	n.a.	n.a.	77.9	83.8	92.9	100.0	104.6	104.9	107.0	112.1
Finance commitments for new dwellings	'000		19.7	19.1	17.0	15.3	15.7	16.1	11.9	13.0	16.0	15.7	18.6
Finance commitments for new dwellings	\$m		694	790	728	720	844	1 002	880	1 041	1 312	1 315	1 724
Finance commitments for alterations and additions	\$m		641	597	507	499	707	998	905	983	1 359	1 642	2 899
HOUSING ASSISTANCE		Units	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Public sector dwelling stock	'000		259.7	273.5	288.3	315.5	327.7	337.7	351.7	362.0	369.5	376.7	n.y.a.
Housing waiting list	'000		140.7	144.6	156.2	168.7	198.1	200.9	195.0	202.3	216.3	232.2	n.y.a.
Applicants accommodated	'000		37.5	41.7	46.5	49.8	47.8	49.3	53.1	51.9	49.3	54.2	n.y.a.

Reference periods:

Except for the number of dwellings; the proportions which are houses, flats and apartments, owned, being purchased, and public rental; and mean weekly rent, figures are for the year ending 30 June.

Housing — state summary

HOUSING STOCK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Dwellings	'000	1994	2 237.2	1 657.6	1 194.1	587.9	640.7	183.3	66.5	110.6	6 677.9
Houses (of dwellings)	%	1994	76.2	81.1	82.5	77.7	81.4	84.7	63.2	81.3	79.4
Flats and apartments (of dwellings)	%	1994	15.4	12.8	12.6	6.0	7.1	9.7	25.0	9.3	12.5
Owned (of dwellings)	%	1994	44.0	44.3	39.3	41.1	37.7	45.2	14.3	28.1	41.8
Being purchased (of dwellings)	%	1994	25.8	30.1	28.1	28.5	32.0	25.4	29.3	36.3	28.3
Public rental (of dwellings)	%	1994	7.0	3.7	4.1	11.2	6.3	7.3	21.4	12.8	6.2
Size of new private sector houses	m ²	1993-94	187	182	195	184	212	174	185	182	192
Size of new public sector houses	m ²	1993-94	183	144	147	102	133	149	128	148	141
Dwellings completed	'000	1993-94	45.5	30.2	49.2	11.8	21.7	3.8	1.4	3.5	167.2
HOUSING COSTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Affordability index(a)	no.	1993-94	130.1	153.4	158.3	185.7	172.7	204.0	n.a.	169.7	162.8
Finance commitments for new dwellings	'000	1993-94	5.5	4.0	3.4	2.6	1.3	0.2	0.1	1.4	18.6
Finance commitments for new dwellings	\$m	1993-94	595.9	320.1	312.4	200.9	122.5	16.1	9.0	147.6	1 724.4
Finance commitments for alterations and additions	\$m	1993-94	1 078.2	640.0	530.2	221.8	265.6	64.9	24.7	73.7	2 898.9
Mean weekly rent	\$	1994	135	115	116	88	104	93	98	128	118
HOUSING ASSISTANCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Public sector dwelling stock	'000	1992-93	127.3	66.6	47.0	63.0	35.8	14.3	10.4	12.4	376.7
Housing waiting list	'000	1992-93	81.8	47.5	23.2	41.9	17.8	5.0	8.9	6.1	232.2
Applicants accommodated	'000	1992-93	13.3	9.4	10.2	8.0	7.3	2.1	1.7	2.2	54.2

(a) State data refer to capital cities only.

Housing — definitions and references

- Affordability index** — the ratio of average household income to the average income needed to meet the repayments for an average established dwelling purchased by a first home buyer. A value of 100 indicates that a household with average income would meet the average income requirements to service the average mortgage. An increase in the index represents an improvement in affordability. Reference: Commonwealth Bank of Australia and the Housing Industry Association *Housing Report*
- Alterations and additions** — all approved structural and non-structural changes to a dwelling of a value of not less than \$10,000 which are integral to the functional and structural design of the dwelling, eg garages, carports, pergolas, reroofing, recladding etc., but excluding swimming pools, ongoing repairs, landscaping, and maintenance and home improvements not involving building work. Reference: Housing Finance for Owner Occupation, Australia (5609.0); Building Activity, Australia (8752.0)
- Applicants accommodated** — the total number of applicants accommodated in public rental accommodation in a year. Reference: Department of Health, Housing and Community Services *Annual Report*
- Average weekly earnings index** — the total weekly ordinary time (before tax) earnings of full-time adult employees divided by the total number of full-time adult employees and expressed as an index with base year 1989-90=100. Reference: Average Weekly Earnings, Australia (6302.0)
- Being purchased** — a dwelling that is currently being purchased for accommodation by the occupant(s) by means of a mortgage or other form of finance. Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992; Australian Housing Survey, 1994
- Dwellings** — occupied self-contained residences including houses, townhouses, semi-detached houses, terrace homes, home units, apartments etc. Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992; Australian Housing Survey, 1994
- Finance commitments** — firm offers to provide finance for owner-occupation or alterations and additions which have been, or are normally expected to be, accepted. Commitments to provide housing finance to employees and commitments accepted and cancelled in the same month are included. Reference: Housing Finance for Owner Occupation, Australia (5609.0)
- Flats and apartments** — dwellings contained in blocks having two or more storeys of dwelling units. Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Australian Housing Survey, 1994
- Houses** — dwellings separated from other dwellings, buildings or structures by space of at least half a metre to allow access on all sides. This category also includes houses which have an attached flat. Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992; Australian Housing Survey, 1994
- Housing interest rate** — the financial year annual average of the interest rate applicable on the last working day of each month to standard variable rate loans for owner-occupation of large bank housing lenders. It is the predominant or representative rate (or range of rates) of major banks, although some banks may quote rates outside the ranges. Reference: Reserve Bank of Australia *Monthly Bulletin*
- Housing waiting list** — the number of applicants (households) waiting for public rental accommodation on 30 June. Reference: Department of Health, Housing and Community Services *Annual Report*
- Materials used in house building price index** — prices of selected materials used in the construction of dwellings expressed as an index with base year 1989-90=100. Reference: House Price Indexes: Eight Capital Cities (6416.0)
- Mean weekly rent** — Reference: Australian Housing Survey, 1994
- Owned** — a dwelling owned outright by the occupant(s). Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992; Australian Housing Survey, 1994
- Private/public sector dwellings completed** — when building activity has progressed to the stage where the building can fulfil its intended function. The ABS regards buildings as completed when notified as such by the respondents (builders) to the survey. Reference: Building Activity, Australia (8752.0)
- Private rental index** — the price of rent of a privately owned dwelling expressed as an index with base year 1989-90=100. Reference: Consumer Price Index, Quarterly (6401.0)
- Project home price index** — the price of dwellings available for construction on a client's block of land expressed as an index with base year 1989-90=100. Reference: House Price Indexes: Eight Capital Cities (6416.0)
- Public rental** — dwellings rented from a State Housing Department, Trust or Commission, the ACT Housing Trust or the Northern Territory Department of Lands, Housing and Local Government. Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992; Australian Housing Survey, 1994
- Public rental index** — the price of rent of a government authority dwelling expressed as an index with base year 1989-90=100. Reference: Consumer Price Index, Quarterly (6401.0)
- Public sector dwelling stock** — those rental dwellings held by state housing authorities. Reference: Department of Health, Housing and Community Services *Annual Report*
- Size of new private/public sector houses** — average floor area of houses intended for private/public ownership at building completion. Reference: Building Activity Microfiche Service, Australia (8753.0)

Trends in housing

HOUSING STOCK

Most Australian homes have brick walls and at least three bedrooms and are heated by electricity or mains gas.

Housing construction and design methods have changed over time in response to changing housing needs. These changing needs result from factors such as changes in the age structure of the population, household composition, family size, labour force participation and lifestyle (see Australian Social Trends 1994 pp. 35–39 *Changes in living arrangements*).

The link between housing and lifestyle is of increasing importance. The growing need to tailor housing to people's lifestyles is changing housing design and construction. The home is often now the site for activities such as home-based employment and home leisure (see *Home workers* pp. 94–97 and *Leisure at home* pp. 164–167) as well as family living. Increasingly, people require housing designed with purpose-built space for such activities.

Environmental concerns have also influenced housing design and construction. It is recognised that poorly designed and constructed dwellings can contribute to environmental problems through inefficient energy use. However, energy can be used more efficiently in homes by an appropriate use of solar energy and natural climatic influences. Data for monitoring such issues are currently limited to those available on the use of alternative housing materials, fuels and insulation.

Dwelling numbers and size

A dwelling is defined by the ABS as a self-contained suite of rooms for a household that is intended for long-term residential use and has facilities for cooking and bathing. Between 1961 and 1994 the number of occupied dwellings in Australia more than doubled, from 2.8 million to 6.7 million. In 1961, 88% of occupied dwellings were separate houses. By 1994 this had decreased to 79%. The increase in the number of dwellings outstripped the increase in the population over this period, and therefore the average number of occupants per dwelling decreased, from 3.6 to 2.7.

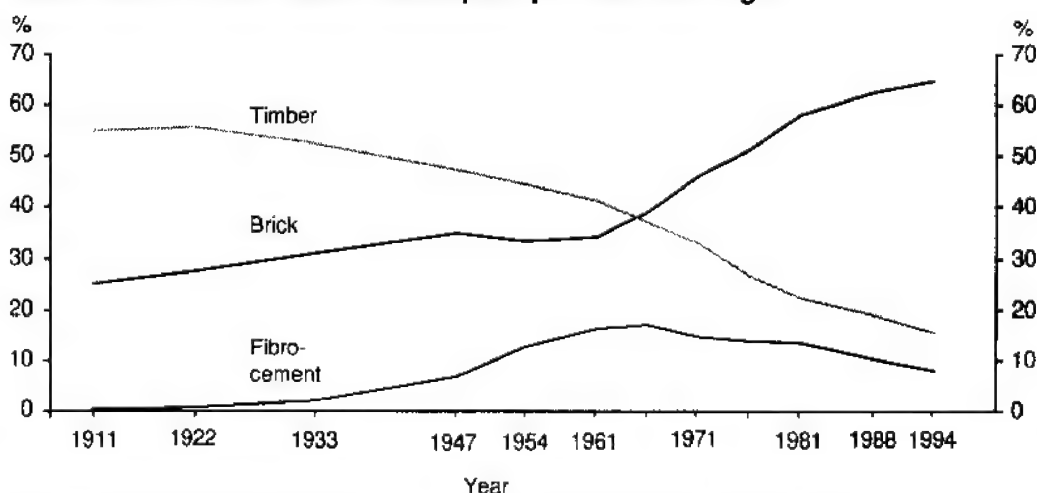
Despite housing fewer people on average, dwellings are getting bigger. The number of separate houses with four or more bedrooms increased from 15% in 1971 to 23% in 1994. Between 1984 and 1994, the average size of newly constructed private dwellings increased by 15% to 192 square metres (see *Housing — national summary table* p. 130).

Housing materials

Between 1911 and 1994 over three-quarters of all private occupied dwellings had outer walls of made brick or timber, traditional materials used for the outer walls of Australian buildings.

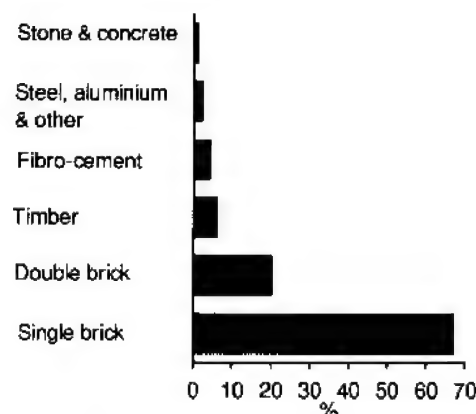
However, there has been a long-term shift away from timber towards brick as the most

Materials of outer walls of occupied private dwellings



Source: Census of Population and Housing (1911–1981); Australian Housing Survey (1988 and 1994)

Materials used for outer walls of new dwellings, 1993-94



Source: Building Approvals

popular material for outer walls. In 1911, 55% of dwellings had outer walls made of timber and 25% had outer walls made of brick. In 1966 for the first time there was a greater proportion of dwellings with brick outer walls than timber. In 1981, 58% of dwellings had outer walls made of brick and 22% had outer walls made of timber. By 1994, 65% of dwellings had outer walls made of brick and 16% had outer walls made of timber.

The proportion of dwellings with outer walls made of fibro-cement increased between 1933 and 1961 to 16% of all dwellings and then decreased to 13% by 1981. By 1994, 8% of

dwellings had outer walls made of fibro-cement.

Recent data on the material used for the outer walls of new dwellings show the continuing preference for brick. In 1993-94, 87% of new dwellings had outer walls of brick; 67% were single brick and 20% were double brick. Only 6% of new dwellings had timber outer walls.

There were significant differences in the materials used for outer walls between states and territories. In 1993-94, 87% of new dwellings in Western Australia and 66% in the Northern Territory had outer walls of double brick. In the other states and territories the proportion with double brick ranged from 13% (New South Wales) to 1% (Victoria and the Australian Capital Territory). Single brick new dwellings were most common in the Australian Capital Territory (97%), South Australia (88%) and Victoria (86%). Tasmania had the highest proportion (14%) of new dwellings built with timber walls.

Cost of materials

Between 1987 and 1994 the cost of materials used in house building increased by 44% (see *Housing — national summary table p. 130*). One factor in this increase may have been the cost of using materials to build more environmentally friendly dwellings. While energy conservation measures, such as solar energy and insulating walls and ceilings, may add to the initial cost of construction, the longer term financial savings, as well as

Proportion of dwelling types with selected rooms/amenities, 1994

Rooms/amenities	Separate house	Semi-detached (a)	Flat/unit	Other (b)	All dwellings
	%	%	%	%	%
3 or more bedrooms	83.4	37.0	10.2	0.0	70.4
2 or more bathrooms or ensuites	27.7	9.5	5.1	0.0	23.3
Separate toilets (rooms)	81.4	64.4	37.4	27.4	74.4
Laundries	95.9	81.5	49.8	20.8	88.8
Studies/sunrooms	27.7	6.4	5.1	0.0	23.2
Dual flush toilets	40.6	45.0	25.1	20.9	39.0
Reduced flow shower heads	24.1	15.1	10.1	15.5	21.8
	'000	'000	'000	'000	'000
Total	5 300.7	527.9	832.5	16.8	6 677.9

(a) Includes row/terrace houses and townhouses.

(b) Includes caravans not in caravan parks, houseboats, improvised homes and houses and flats attached to shops. These dwellings will often not be self contained.

Source: Australian Housing Survey; Environmental Issues Survey

Proportion of households using selected energy sources, 1994

Fuel	Room heating %	Hot water %
Electricity	36.8	60.6
Mains gas	28.7	30.8
Wood/coal	16.8	(a)
Solar	(a)	4.6
Bottled gas	3.2	(a)
Oil	2.8	(a)
Other	1.6	4.0
None	10.1	(a)
All households	100.0	100.0

(a) Included in other.

Source: Australian Housing Survey

savings to natural resources, are considered important by many home buyers¹.

Rooms and amenities

The number and types of rooms and amenities in a dwelling can be used as a broad indicator of its size and characteristics. In 1994, 70% of dwellings had three or more bedrooms. 83% of separate houses had three or more bedrooms, compared to 37% of semi-detached houses and 10% of flats/units. 23% of dwellings had two or more bathrooms or ensuites. 74% of dwellings had separate toilets (rooms). Separate houses were more

likely to have these facilities than other types of dwellings.

Dual flush toilets and reduced flow shower heads are seen as environmentally friendly because they use less water. In 1990, 25% of dwellings had dual flush toilets. By 1994, 39% of households had dual flush toilets and 22% of households had reduced flow shower heads.

Heating and insulation

The source of energy used for household lighting, water heating and room heating has been a focus of environmental concern in recent years. In 1994, 37% of households used electricity for room heating and 29% used mains gas. 17% of households used wood or coal for room heating. The most commonly used fuels for heating water were electricity (61%) and mains gas (31%).

Due to climatic variations across Australia, there are marked differences between the states and territories in the use of household heating. While over 99% of households in Tasmania, Victoria and the Australian Capital Territory used energy for room heating, only 18% of households in the Northern Territory and 45% of households in Queensland did so.

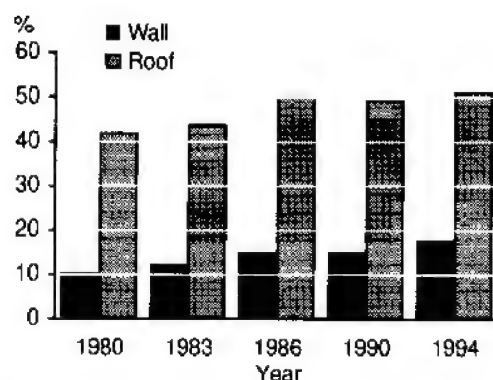
Overall, the proportion of dwellings with insulation increased slightly between 1980 and 1994. In 1980, 11% of dwellings were reported as having wall insulation and 42% with roof insulation. In 1990 the proportions had increased to 15% and 49% respectively with 13% of dwellings reported as having both wall and roof insulation. By 1994, 18% of dwellings were reported as having wall insulation and 51% as having roof insulation. 15% of households were reported as having both wall and roof insulation.

In 1994 the main reasons why households installed insulation were because it was thought to be warmer in winter and cooler in summer and it would save on energy bills. The main reasons why households without insulation had not installed it were the cost, being uninterested in it or not having thought about it, or thinking that it was unnecessary because of the climate.

Endnotes

- 1 National Housing Strategy (1992) *Housing choice: reducing the barriers* Issues paper no. 6.
- 2 Housing Characteristics and Decisions: A Comparative study of Sydney, Melbourne, Adelaide and Canberra (8710.0).

Proportion of dwellings with insulation



Sources: National Energy Surveys; Survey of Income & Housing Costs and Amenities (1990); Australian Housing Survey (1994)

Related ABS publications

- ◆ Building Approvals, Australia (8731.0)
- ◆ Survey of Income & Housing Costs and Amenities: Characteristics of Dwellings, Australia (4133.0)
- ◆ Housing Characteristics and Decisions (8710.0)

Safe as houses?

HOUSING STOCK

In 1993, over half a million households were victims of household crime. 62% of these households were not members of neighbourhood or rural watch.

Since World War II most western countries have experienced increases in recorded crime as measured by police statistics. However, increases in official crime rates may merely indicate an increase in the number of offences recorded by the police rather than an actual increase in the number of offences committed.

There is a public perception that crime, particularly violent crime, has increased in Australia in recent years¹. But 1993 data indicate that there has been only a marginal change in the level of violent crime compared to 1983. While the victimisation rate for robbery has doubled from 0.6% to 1.2%, the rate for sexual assault has remained virtually unchanged at 0.6% and the rate for other types of assault has decreased from 3.4% to 2.5%. It should be noted that these 1983 and 1993 data are 'snapshots' of the incidence of violent crime and that criminal activity may have fluctuated at times between these two years.

Violence in the home

Overall, there were proportionally fewer violent crimes in Australian homes in 1993 than in 1983. While there were approximately 1,000 more assaults inside victims' homes in 1993 than in 1983, this represented a marginal decrease in the victimisation rate from 0.5% to 0.4%. Assaults outside victims' homes decreased by almost 6,000, a decrease in the rate from 0.3% to 0.2%. The number of assaults inside another person's home also decreased, from 19,000 in 1983 to 12,000 in

ABS crime surveys

While ABS Crime and Safety Surveys can be used to measure changes in patterns of crime, care must be used in comparing their results because of methodological and definitional differences between the surveys. Important differences between the 1983 and 1993 surveys include:

- ◆ in 1983 data were collected using face-to-face interviewing while in 1993 self-completed questionnaires were used;
- ◆ although both surveys had a 12-month reference period, the 1993 survey was conducted in April while the sample for the 1983 survey was spread over 12 months, from February 1983 to January 1984.

The *victimisation rate* is the number of people or households in a particular category who reported being victims of crime, expressed as a percentage of all people or households in that category. Victims were counted only once for each type of offence, regardless of the number of incidents of that type. *Household crime* consists of break and enter, attempted break and enter and motor vehicle theft. The latter includes the theft of a motor vehicle, owned or used exclusively by a household member, which may have occurred away from the home.

Comparisons with police statistics

Responses obtained in ABS Crime and Safety Surveys are based on the respondents' perceptions that they have been the victim of an offence. Data on crimes not reported to police are collected. The terms used summarise the wording of questions asked of respondents and may not correspond with legal or police definitions.

Victimisation rate for assault in the home

Location of last incident	1983			1993		
	Men	Women	Persons	Men	Women	Persons
	%	%	%	%	%	%
At home — inside	0.3	0.7	0.5	0.2	0.6	0.4
At home — outside	0.3	0.2	0.3	0.2	0.1	0.2
At another person's home — inside	0.2	0.2	0.2	0.1	0.1	0.1
Total	0.8	1.1	1.0	0.5	0.8	0.7
	'000	'000	'000	'000	'000	'000
Total victims in the home	45.8	60.9	106.8	37.8	57.2	95.0

Source: Crime and Safety Survey

Victimisation rate for break and enter, 1993

Type of offence	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Actual break and enter									
Capital city	4.2	3.4	6.9	5.6	8.6	4.8	n.a.	n.a.	4.8
Rest of state	2.9	3.0	3.8	3.4	3.9	3.4	n.a.	n.a.	3.7
Total	3.7	3.3	5.2	5.0	7.5	4.0	7.4	5.0	4.4
Attempted break and enter									
Capital city	2.7	2.7	3.4	4.8	5.6	1.9	n.a.	n.a.	3.2
Rest of state	2.5	2.5	3.0	1.2	2.7	2.2	n.a.	n.a.	2.9
Total	2.6	2.6	3.2	3.8	4.9	2.0	5.4	4.9	3.1

Source: Crime and Safety Survey

1993, a decrease in the rate from 0.2% to 0.1%.

Women were more likely than men to be assaulted inside their homes. In 1993, 41,000 women were assaulted inside their homes compared to 16,000 men.

Territory also had relatively high rates of break and enter and attempted break and enter while Melbourne and Sydney had comparatively low rates. With the exception of attempted break and enter in Tasmania, all states recorded higher victimisation rates in the capital city than in the rest of the state.

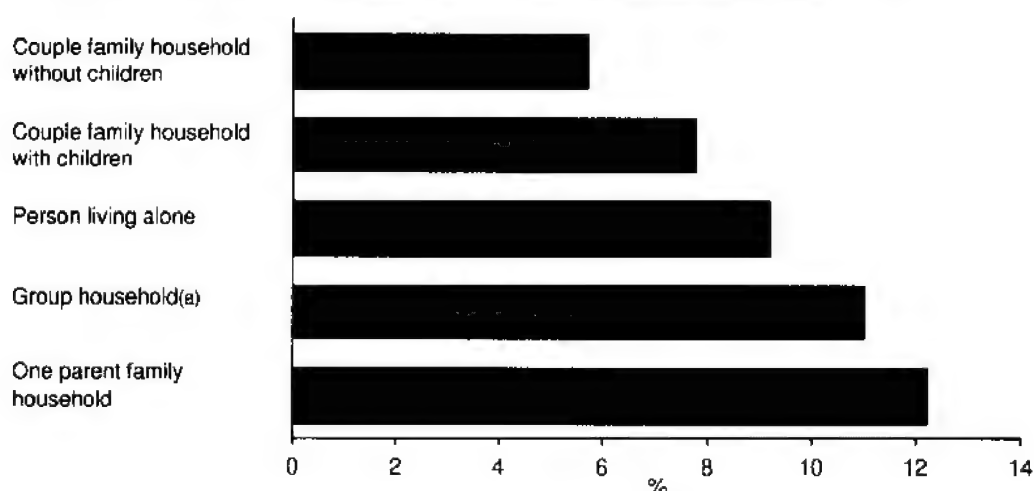
Break and enter

There was a relatively small increase in break and enter and attempted break and enter in 1993 compared to 1983. Victimisation rates increased from 6.1% to 6.8%.

There were variations in break and enter victimisation rates between the states and territories. Of the state and territory capital cities, Perth had the highest rates for break and enter and attempted break and enter with 8.6% and 5.6% respectively. The Northern

Who is victimised?

One parent families and people living in group households had the highest rates of victimisation for household crime. People living alone had the next highest victimisation rate. These three household types are more likely to be renters and to live in high density accommodation than couple families (see Australian Social Trends 1994 pp. 159-162 *Housing the population*).

Victimisation rate for household crime by household type, 1993

(a) Includes other family households.

Source: Crime and Safety Survey

Home security

Households who had some kind of home security device had considerably higher victimisation rates than those who did not. This could be because victims of household crime may have installed security devices after they had been victimised. It could also be that households with security devices are more likely to live in areas with high crime rates so their likelihood of victimisation is high, regardless of what security precautions are taken.

Membership of Neighbourhood Watch or Rural Watch reduced the likelihood of victimisation for household crime. In 1993, members of these two schemes had a

household crime victimisation rate of 7.3% while the victimisation rate for non-members was 8.5%.

Renters had a higher victimisation rate for household crime than home owners. Informal sources of security, such as neighbours watching over premises while occupants are away, are perhaps less available to renters because of their generally higher levels of mobility.

Reporting to police

Police statistics often underestimate real crime rates because they only include those crimes which are reported. Depending on the nature of the crime, reporting rates may be relatively low. For example, in 1993, about half of all robberies, a third of assaults and a quarter of sexual assaults were reported to the police.

In 1993, the police were told about 79% of a break and enters and 32% of attempted break and enters. These figures may have been lower if victims were not required to report incidents to the police in order to claim insurance.

The main reasons given for not telling the police about crimes were that victims thought the incidents were too trivial or unimportant or that they believed that the police either could not or would not do anything about the incident.

Endnotes

- 1 Mackay, H. (1992) *Reinventing Australia: the mind and mood of Australia in the 90s* Angus and Robertson.
- 2 Reported in Queensland Domestic Violence Task Force (1988) *Beyond These Walls*.

Victims of household crime, 1993

Type of security device	Victimisation rate	
	Victims '000	%
No security devices	103.1	6.6
Physical devices	381.7	8.9
Electronic devices	100.8	10.7
Other	47.6	11.2
Total households	522.0	8.3
Member of Neighbourhood or Rural Watch	130.9	7.3
Not a member of Neighbourhood or Rural Watch	322.0	8.5
Don't know whether member of Neighbourhood or Rural Watch	69.2	9.9

Source: Crime and Safety Survey

Related ABS publications

- ◆ Crime and Safety, Australia (4509.0)

Investment in residential rental property

HOUSING STOCK

In 1993, three-quarters of a million people were investors in residential rental property. 78% of these people invested in only one rental property.

The supply of rental housing has been left largely to market forces¹. This has not always resulted in an adequate supply of affordable private rental dwellings, particularly for low and moderate income earners. Investment by individuals in residential rental property has a significant impact on rental housing supply and subsequently affects the demand for public housing.

The level of investment in residential rental property is closely related to economic factors such as interest rates, finance availability, taxation policy, and the potential of alternative investments to produce attractive long-term returns. These variables have contributed to large variations in the levels of investment in residential rental property over the past decade.

In 1994, 1.2 million Australian households lived in private rental dwellings. These dwellings accounted for almost three-quarters of all rental accommodation².

Trends in rental investment

In the early 1980s there were large decreases in the levels of investment in residential rental property³. This was mainly due to four factors: low levels of investor confidence due to poor capital gains in most capital city markets in the early 1980s; competition from packaged investment opportunities, such as cash management trusts and property trusts, which gave small investors more choice; the introduction of capital gains tax in 1985; and the removal of some negative gearing concessions in 1985¹. These factors led to shortages of private rental accommodation which caused problems for renters, particularly those on low incomes. This in turn led to an increase in demand for public housing (see Australian Social Trends 1994 pp. 171-174 *Public tenants*).

During the late 1980s, investment in residential rental property increased¹. Three main factors caused this increase: the stock market crash of 1987 led investors to seek more traditional forms of investment; the change to negative gearing was reversed, which again meant that any expenses incurred on a rental property could be offset against other income to reduce tax; and new financing options and reductions in home

Investors and residential rental property

Residential rental properties include separate houses, semi-detached, row or terrace dwellings, townhouses, single flats or units, and blocks of flats or units. A property may therefore include a number of dwelling units.

Investors in residential rental property are people aged 18 years and over who own, or own a share in, residential rental property.

loan interest rates attracted investors back to investing in residential rental property.

Who invests?

In 1993, 752,100 people (6% of those aged 18 and over) owned, or were buying, at least one residential rental property. Men were more likely to invest in residential property than women, 54% compared to 46%.

People aged 45-54 were most likely to be investors in residential rental property. In 1993, 10% of all people aged 45-54 were investors (11% of men and 9% of women). Investment in residential property may be highest in this age group for four reasons. Firstly, this is the peak earning age for most people. Secondly, the demands on people's income reduce as their children begin to leave home and require less financial support from their parents. 60% of investors in this age

Proportion of all people who are investors in residential rental property, 1993

Age group (years)	Men	Women	Persons
	%	%	%
18-34	4.0	3.3	3.7
35-44	7.9	7.3	7.6
45-54	10.9	9.1	10.1
55-64	9.0	6.7	7.8
65 & over	4.1	2.9	3.4
Total	6.6	5.3	6.0
	'000	'000	'000
Total investors	409.7	342.3	752.1

Source: Survey of Rental Investors

group were married without dependent children. Thirdly, at this age people have large equity in their own home and are able to borrow against that. Finally, at this age people are securing investments to give them financial security for their retirement.

Over half of all investors (57%) purchased their most recent property with their spouse (including de facto). A further 27% purchased by themselves and 7% with another relative. The remaining 9% of investors purchased their most recent property either in a business partnership, as a principal in a company, or through some other arrangement.

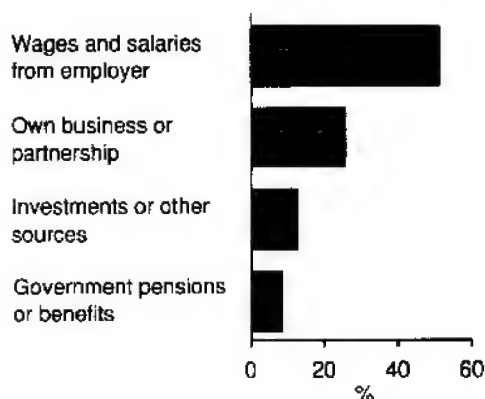
Among all people who purchased their first residential rental property since 1983, more than 70% were under 45 years of age. The majority of investors (58%) purchased their first residential rental property using a loan or mortgage. A further 27% became investors by renting out their former homes.

Income

Almost half (46%) of all investors had a weekly income of less than \$480. This was due to the high proportion of female investors with lower incomes. Many of these women were joint investors with their spouses who may have had higher incomes than theirs. Less than one-third of male investors had a weekly income of less than \$480 compared to almost two-thirds of female investors.

Over half (51%) of all rental investors reported that their main source of income was

Main source of income of investors in residential rental property, 1994



Source: Survey of Rental Investors

a wage or salary. 13% of investors reported that their main source of income was investments or other sources. People whose main source of income was from investments tended to be older than other rental investors. 45% of rental investors aged 65 and over reported that investments were their main source of income. This may be due to people investing in rental property as a source of retirement income.

In 1993, 78% of investors had only one rental property and 13% owned two. 4% owned five or more. The likelihood of owning more than

Type of ownership of most recently acquired residential rental property, 1993

Dwelling type	Individual	With spouse/ partner	With relative	In partner- ship	Principal in company	Other	All investors
	%	%	%	%	%	%	%
Separate house	56.0	66.2	55.8	65.6	54.4	47.5	62.0
Semi-detached, row, terrace, townhouse	7.1	6.1	7.8	8.3	4.4*	6.9*	6.6
Single flat/unit	32.3	21.3	28.1	19.5	20.6*	38.1	25.0
Block of flats/units	3.2	4.8	6.2	4.9*	18.4*	7.5*	4.8
Other	1.4	1.7	2.1*	1.4*	2.2*	**	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	'000	'000	'000	'000	'000	'000	'000
Number of investors	205.0	426.3	56.3	34.9	13.6	16.0	752.1

Source: Survey of Rental Investors

one investment property rose with the weekly income of investors.

Type of rental property

In 1993, 62% of the residential rental properties most recently acquired by investors were separate houses and a further 25% were single flats/home units. In comparison, the stock of dwellings counted in the 1991 Census of Population and Housing consisted of 78% separate houses and 11% flats and units (see Australian Social Trends 1994 pp. 159–162 *Housing the population*). Individual investors were more likely to invest in single flats or units than those investing with other people. Investors who had acted as the principal in a company were more likely than other investors to invest in blocks of flats or units.

The type of property people invested in varied according to location. The majority (62%) of people investing outside their own state or territory bought high density property (flats, units, townhouses). Those investing within their own postcode or capital city/region were more likely to invest in a separate house.

In 1993, the median estimated market value of residential rental properties was \$118,000. 18% of investors estimated the value of their most recently acquired property to be \$170,000 or more. 20% of investors estimated

the value of their most recently acquired property to be less than \$85,000.

The median weekly rent received from the most recently acquired property was \$145. 12% of investors reported receiving \$230 or more a week. 18% of investors reported receiving less than \$110 a week.

Location of investment properties

In 1993, most investors (97%) invested in property in their own state or territory. 80% of these people invested in the same capital city or region, 29% in their own postcode. People were more likely to manage their investment property themselves if it was close to their usual place of residence. For properties in their postcode, 54% of investors managed the property themselves. Of those people who invested in residential rental property outside the state or territory of their usual residence, almost three-quarters had their property managed by a real estate agent.

Reasons for investing

In 1993, 52% of investors reported that they invested in residential rental property for a secure long-term investment. This was the most common reason given by investors of all ages.

The other reasons why people invest in residential rental property varied with age. Investors aged under 45 were more likely

Reasons for investing in residential rental property, 1993

Reason for investing	18–34 years	35–44 years	45–54 years	55–64 years	65 years and over	All people
	%	%	%	%	%	%
Secure long-term investment	57.6	55.1	51.5	47.8	37.2	52.1
Income from rent	14.4	14.2	14.5	16.9	25.6	15.7
Reduce taxable income from negative gearing	20.4	18.2	14.3	5.1	2.1*	14.3
Plan to return to live in dwelling at later date	7.8	8.5	4.6	3.4	1.9*	6.0
Possible future home	13.7	8.2	8.7	12.1	8.5	10.2
Potential for capital gain	10.3	12.2	9.8	5.4	7.1	9.7
Investing for retirement	5.9	14.0	15.0	12.7	10.1	11.9
Other(a)	10.9	16.0	15.5	19.4	25.7	16.0
Total(b)	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes unable to sell the property, the property formed part of a larger property (eg houses on farms, dwellings attached to commercial properties), and possible future home for children or other relatives.

(b) Proportions do not add to 100% since investors were asked to report all reasons for investing.

Source: Survey of Rental Investors

Investors and state of usual residence, 1993

State	Investors	Of all Investors	Of all persons
	'000	%	%
NSW	220.5	29.3	5.1
Vic.	187.8	25.0	5.8
Qld	158.3	21.0	7.2
SA	59.4	7.9	5.5
WA	85.0	11.3	7.1
Tas.	14.6	1.9	4.4
NT	7.6	1.0	8.7
ACT	18.7	2.5	8.8
Australia	752.1	100.0	6.0

Source: Survey of Rental Investors

than those in older age groups to say that they had invested to reduce their taxable income or for future capital gains. People aged 45–54 were more likely to have invested for their retirement (15%). Investors aged 55 and over were more likely to have invested to produce income from rent.

Related ABS publications

- ◆ Investors in Rental Dwellings in Australia (8711.0)

State comparison

In 1993, the Australian Capital Territory and Northern Territory had the highest proportion of investors in residential rental property (9%). This may be partly due to

these territories having the highest average total weekly earnings of all employees, \$609 in the ACT and \$566 in NT compared to \$526 for all employees (see *Income — national summary table* p. 106). However, investors from these territories only accounted for 4% of all investors.

Intending investors

In 1993, 3% of people reported that they intended to invest in residential rental property sometime in the next two years. Of these 35% were current investors planning to purchase another property. The majority of intending investors were investing for a secure long-term investment (63%) and 24% were investing for their retirement.

In 1993, intending investors had a higher income than current investors. 35% of intending investors had a weekly income of less than \$480 compared to 46% of all current investors.

Endnotes

- 1 Elton, B and Associates Pty. Ltd. (1991) *The National Housing Strategy: The supply side of the private rental market*.
- 2 Survey of Rental Tenants.
- 3 Indecs (1992) *State of Play 7: the Australian economic debate* Allen and Unwin, Sydney.

Low income private renters

HOUSING COSTS

In 1990, low income private renter families spent 36% of their incomes on rent. By 1994, this had increased to 42%.

Many Australians look forward to owning their own homes. They begin to realise their ambition by saving a deposit and then taking out a mortgage to purchase their home. Home purchase is most common among couple families (see Australian Social Trends 1994 pp. 159–162 *Housing the population*). Between 1990 and 1994, a period of falling housing interest rates, there was an increase in the proportion of couples who owned or were purchasing their homes (79% to 81%) and a compensating decrease in the number of couples living in rented accommodation.

While saving for a deposit, people often rent accommodation. However, a family's ability to save largely depends on the amount of rent they pay. In turn, rent is related to the availability of private rented accommodation and public housing. Some people in rented accommodation, especially those on low incomes, are never able to save a deposit. Many on low incomes remain renters for most, if not all, of their lives.

In 1994, 1.3 million households rented their accommodation. Most (68%) were renting privately. 211,400 households were low income private renters, ie receiving incomes which put them in the bottom 40% of the income distribution. They represented 48% of all low income renting households.

Changes in the 1990s

Between 1990 and 1994 the number of low income households who were renting increased from 398,000 to 443,800 and the number who were renting privately increased

Family and household types

This review considers only single family households and one person households in rented private dwellings. The family may consist of a couple with dependants, a couple without dependants or a lone parent with dependants. Non-dependent family members may be present in the household but their incomes have been excluded from the total household income. Group households have also been excluded.

Low income households are those whose total weekly income is in the bottom 40% of the income distribution of all income units who were renting.

from 176,100 to 211,400. However, there was a change in the composition of low income private renter households. There were decreases in the proportions of couples and people living alone and an increase in the proportion of one parent families.

In 1990, more low income one parent families were in public rental accommodation than were in private (53,100 compared to 29,900). By 1994 this situation had reversed. This was due both to an increase in the number of one parent families and to a shortage of public rental accommodation (see *Housing — national summary table p. 130*).

Household incomes and rent

Between 1990 and 1994 median rents paid by low income households increased by 31%. Those in private housing paid more rent than those in public housing but were subject to a

Low income households who rented

Family/household type	1990			1994		
	Public renters	Private renters	All renters(a)	Public renters	Private renters	All renters(a)
	'000	'000	'000	'000	'000	'000
Couple with dependants	9.1	17.1	28.4	7.7	21.7	30.2
Couple without dependants	24.4	29.3	56.9	20.0	23.1	44.8
One parent with dependants	53.1	29.9	86.0	47.7	51.1	102.8
One person household	105.6	99.8	226.7	129.3	115.5	265.9
All families	192.3	176.1	398.0	204.7	211.4	443.8

(a) Includes families who rented from their employers or had other rental arrangements.

Source: Survey of Income & Housing Costs and Amenities (1990); Rental Tenants Survey (1994)

Median weekly rent paid by low income households

Type of landlord	1990		1994		Rent increase 1990-94
	Households	Rent	Households	Rent	
	'000	\$	'000	\$	%
State or territory housing authority	192.3	35	204.7	39	11
<i>Private</i>	176.1	92	211.4	103	12
Real estate agent	82.6	110	116.3	111	1
Person not in the same dwelling	93.5	77	95.1	97	26
Total(a)	398.0	49	443.8	64	31

(a) Includes families who rented from their employers or had other rental arrangements.

Source: Survey of Income & Housing Costs and Amenities (1990); Rental Tenants Survey (1994)

similar increase in their median weekly rental payments.

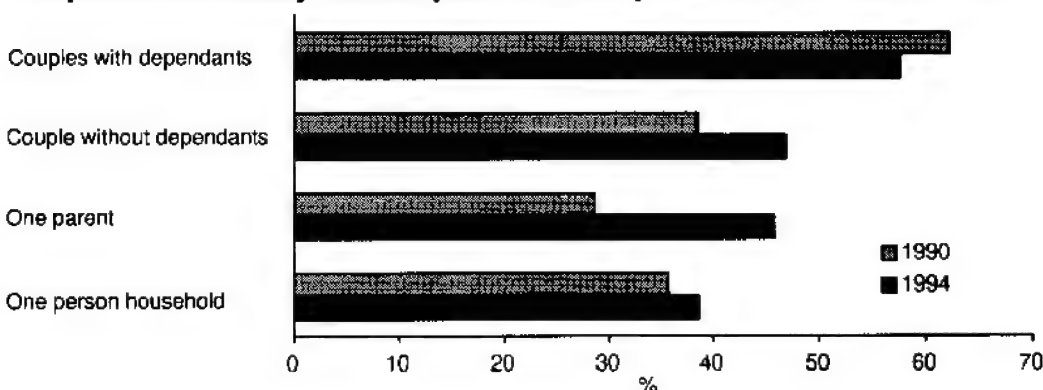
Most of the increase in private rents paid by low income households between 1990 and 1994 was due to rises in rent charged by people, other than real estate agents, not living in the same dwelling as the renting household. Rents charged by real estate agents increased by 1% between 1990 and 1994, and the number of low income households renting from real estate agents increased by 33,700.

Between 1990 and 1994 the proportion of income that low income private renting

households spent on rent increased from 36% to 42%. In particular, there was a marked rise in the proportion of income that low income one parent families spent on rent. In 1990, one parent low income private renter families spent 29% of their incomes on rent compared to 46% of their incomes in 1994.

In 1994 low income private renter households spent 61% of their incomes on rent while those renting public housing spent 25%. Of all family types, low income couples with dependants spent the highest proportion of their incomes on rent whether they were public or private renters.

Proportion of weekly income paid for rent by low income households



Source: Survey of Income & Housing Costs and Amenities (1990); Rental Tenants Survey (1994)

Related ABS publications

- ◆ Survey of Income & Housing Costs and Amenities: Income Units, Australia (6523.0)
- ◆ Renters in Australia (4138.0)

Culture and leisure

Music and performing arts..... 147

In 1990–91, popular music concerts attracted the largest and youngest audiences of all music and performing arts activities.

A sporting nation..... 151

The most popular organised sports in Australia are golf, netball and tennis.

Travel and tourism in Australia..... 156

The number of international visitors travelling to Australia has increased from 125,000 in 1963 to 3 million in 1993.

Culture-leisure workers..... 161

In 1992–93, 1.6 million people did some work in the culture-leisure industry. Most of these people did not receive payment for their work.

Leisure at home..... 164

On average, people spent nearly 4 hours a day on home leisure activities in 1992. Participation in home leisure activities generally increased with age.

Household pets..... 168

In 1994, there were almost as many domestic pets in Australia as people. Two in every five households owned a dog and one in every four owned a cat.

Music and performing arts

SPECIAL FEATURE

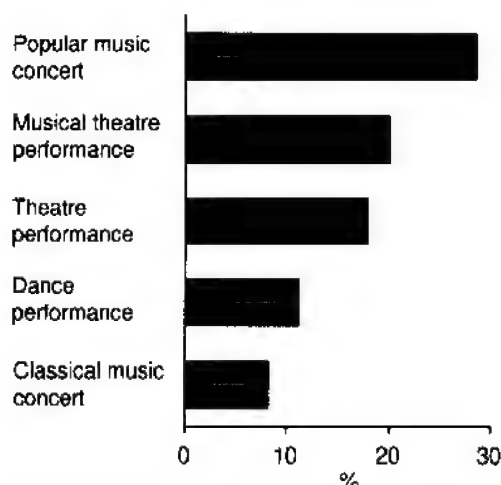
Music and performing arts are an important feature of the cultural life of Australians. They provide a source of entertainment, a source of employment and a creative outlet for many professional and amateur musicians, actors, dancers, singers, directors, designers etc.

Patrons

In 1990-91, more people attended popular music concerts than any other type of performance. 29% of people aged 18 and over (3.5 million) attended a popular music concert at least once in the year. One-fifth of these attended five or more concerts in the year. In addition, 20% went to musical theatre performances, 18% went to theatre performances, 11% went to dance performances, and 8% went to classical music concerts. People were most likely to attend these types of performances only once or twice a year. People living in capital cities were more likely than those living in rural areas to attend more than one performance.

Popular music concerts attracted the youngest audiences. Over half of all people aged 18-24 attended a popular music concert in 1990-91. No data are available on attendance by those aged under 18 but they would probably make

Proportion of people^(a) attending selected types of performances, 1990-91



(a) Aged 18 and over.

Source: Survey of Attendance at Selected Cultural Venues

Music and performing arts

The ABS, through its National Culture and Recreation Statistics Unit, has conducted five surveys in the music and performing arts sector of the National Culture-Leisure Industry Statistical Framework, 4th edition, 1991. Each relate to a different aspect of the sector. One covered patrons who attended various performances of music and performing arts, three covered establishments (music and performing arts organisations, and major venues in capital cities) responsible for music and performing arts products, and one covered a specific product (major musical theatre productions).

A music and performing arts organisation is a limited company, a partnership, a sole proprietor, a cooperative, a group of people incorporated or unincorporated or an organisation created under an act of parliament formed and operated for the purpose of performing musical, theatrical or dance works. Organisations which are primarily service providers, such as promoters or theatrical entrepreneurs, are excluded. Organisations are classified according to their predominant activity:

- ◆ *theatre* includes drama, classical, comedy, puppet, mime, youth and community theatre, and theatre-in-education companies;
- ◆ *dance* includes ballet, classical, contemporary and modern dance, dance theatre, dance revue, ethnic and folk dance companies and dance-in-education companies, whether professional or amateur;
- ◆ *symphony orchestras, chamber and choral groups* present oratorio, classical and contemporary classical music. They include theatre, philharmonic and youth orchestras, singers, vocal and instrumental ensembles;
- ◆ *opera and music theatre* organisations present live performances of opera and music theatre including lyric opera, operetta and musical comedy.

A major venue is one where regular performances take place on a commercial basis, or, in the case of irregular performances, where the size of the venue suggests that attendances would be significant, eg rock/pop concerts at outdoor venues such as sports stadiums.

A performance is a single session, show, gig or appearance by one performer, group of performers or a single collection of independent performers brought together for a specific production. Performances are classified similarly to organisations, ie *theatre, dance, opera and music theatre, classical music concerts* which are defined as those performed by symphony orchestras, chamber and choral groups, and *popular music concerts* which include rock, jazz, pop, folk, country and western, ethnic and multicultural music.

Proportion of people^(a) attending selected types of performances, 1990-91

Age group (years)	Popular music concert	Musical theatre performance	Theatre performance	Dance performance	Classical music concert
	%	%	%	%	%
18-24	53.6	19.0	17.8	11.8	5.8
25-34	35.0	17.5	20.1	11.4	6.2
35-44	27.6	22.0	21.2	13.6	10.2
45-54	22.2	25.6	18.0	11.6	10.2
55-64	15.7	21.0	14.4	10.0	9.3
65 & over	9.7	15.8	11.6	7.1	7.7
Total	28.6	20.1	17.8	11.2	8.2

(a) Aged 18 and over.

Source: Survey of Attendance at Selected Cultural Venues

up a large part of some popular music concert audiences.

People aged 65 and over were the least likely to attend all types of performances except classical music concerts which they attended in larger proportions than people under 35. A greater proportion of women than men attended all types of performances.

Attendance at performances of music and performing arts varied between the states, although in all states and territories a larger proportion of people attended popular music concerts than any other types of performances. The Australian Capital Territory had the highest proportion of people attending all types of performances except musical theatre. Almost twice the proportion

of people in the Australian Capital Territory attended classical music concerts than in other states. The Northern Territory had the second highest proportions of people who attended popular music concerts, dance performances, and theatre performances, and the lowest proportion who attended musical theatre performances. These rates may be related to variables such as the availability and accessibility of performances and the low population base.

Proportion of people^(a) attending selected types of performances, 1990-91

State	Popular music concert	Musical theatre performance	Theatre performance	Dance performance	Classical music concert
	%	%	%	%	%
NSW	28.5	20.0	17.3	10.8	8.4
Vic.	27.5	21.3	17.4	11.1	7.7
Qld	29.3	20.2	17.1	11.0	6.9
SA	27.2	22.4	18.2	10.5	8.4
WA	28.9	16.6	19.6	11.5	8.5
Tas.	31.0	14.4	17.0	9.5	10.1
NT	36.9	13.7	21.4	18.4	9.0
ACT	37.4	21.1	27.6	21.6	17.0
Total	28.6	20.1	17.8	11.2	8.2

(a) Aged 18 and over.

Source: Survey of Attendance at Selected Cultural Venues

Music and performing arts organisations^(a), 1991

Type of organisation	Organisations	Performances	Paid attendances	Government subsidies ^(b)
	no.	no.	'000	%
Theatre	197	24 613	3 453	32.4
Symphony orchestra, chamber and choral groups	172	2 736	1 220	60.7
Dance	49	3 739	1 108	35.2
Opera & music theatre ^(c)	41	941	585	27.3
Total	459	32 029	6 366	39.5

(a) Excludes popular music (eg rock, jazz).

(b) Proportion of annual revenue.

(c) Excludes performances of/attendances at major musicals.

Source: Survey of Music and Performing Arts Organisations

Organisations

In 1991, there were 459 music and performing arts organisations in Australia. 197 of these were predominantly theatre organisations, 172 were symphony orchestras, chamber and choral groups, 49 were dance organisations and 41 were opera and musical theatre organisations. Together these music and performing arts organisations gave over 32,000 performances which attracted 6.4 million patrons. In addition, there were 430 performances staged overseas by Australian-based organisations. These performances attracted 321,000 patrons.

In 1991, music and performing arts organisations received \$81.4 million in subsidies from all levels of government and the Australia Council for the Arts. This accounted for 40% of their annual revenue. The most heavily subsidised organisations were symphony orchestras, chamber and choral groups. 61% of the annual revenue of these organisations came from government subsidies.

In 1991, music and performing arts organisations employed 15,998 people; 13,607 casual employees, 1,957 permanent full-time employees and 434 permanent part-time employees. Most employees of music and performing arts organisations were performing artists.

Music and performing arts organisations also have a large voluntary workforce. In 1993, the majority of all people working in these organisations were not paid for their involvement (see *Culture-leisure workers* pp. 161-163).

Performances at major venues

In 1992, almost 22,000 music and performing arts performances were held in major venues in capital cities. 12.0 million patrons attended these performances. Sydney hosted the largest number of performances in major venues and Darwin held the least. However, Melbourne had the largest number of attendances. This is probably because major venues in Melbourne have a larger total seating capacity than major venues in Sydney.

Over half (58%) of all performances at major venues were theatre performances. However, popular music concerts had the highest number of attendances of any type of performance.

Performances held in major venues^(a), 1992

Type of performance	Performances	Attendances
	no.	'000
Popular music	1 520	3 639
Theatre	12 560	2 709
Symphony orchestras, chamber and choral groups	1 770	1 401
Dance	1 450	828
Opera and music theatre	2 840	2 522
Other performing arts	1 610	865
Total	21 750	11 965

(a) Excludes free performances.

Source: Survey of Major Venues Staging Music and Performing Arts Events in Capital Cities

Related ABS publications

- ◆ Music and Performing Arts, Australia (4116.0)
- ◆ Music and Performing Arts at Major Venues in Capital Cities, Australia (4171.0)
- ◆ Attendance at Selected Cultural Venues, Australia (4114.0)

Major musicals

Major musical theatre productions are musicals staged in a major venue in a capital city which have a run of at least two weeks. Some major musical theatre productions are staged by music and performing arts organisations while others are mounted by theatrical entrepreneurs and promoters. In 1991, 13 major musical productions were surveyed. These productions had 2,100 performances. 2.1 million people attended these performances.

In 1991, these major musical productions employed 1,305 people. These people were employed in various ways such as on weekly contracts for the whole or part of the year, on hourly contracts, or paid to perform a specific task regardless of the time involved. Most employees of major musical productions were performing artists.

People employed^(a) in major musicals, 1991

People employed	Men	Women	Persons
	no.	no.	no.
Artistic personnel			
Performing artists	432	310	742
Other artistic/ support staff	66	36	102
Technical personnel	243	169	412
Other personnel	24	25	49
Total	765	540	1 305

(a) Refers to people employed on any basis during the year, eg permanent, on contract for any period (weekly, hourly, task), casual or any other basis.

Source: Survey of Major Musical Theatre Productions

A sporting nation

SPECIAL FEATURE

The most popular organised sports in Australia are golf, netball and tennis.

Sport is an important part of Australian society. Involvement in sport is widely encouraged through schools, government funding and the media. Playing sport can provide benefit through healthy exercise and by encouraging team work. Sport also provides direct economic benefit to the country through production of goods and services, generation of tourism, and creation of employment opportunities.

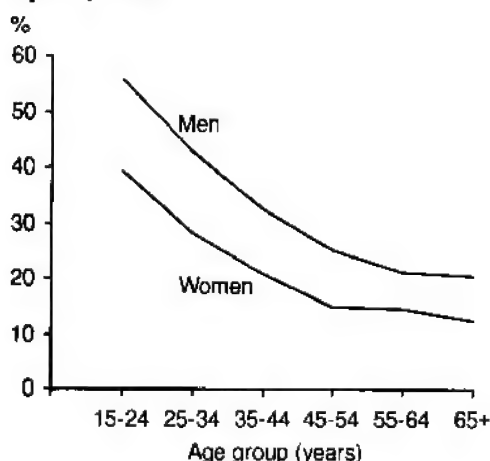
In 1993, one-third of Australians aged 15 and over were involved in sport as players (3.1 million), non-players (0.5 million) or both players and non-players (0.9 million). More men than women were involved as both players and non-players. Fewer than 5% of people involved in sport had some paid involvement.

Age of players

In 1993, at all ages a greater proportion of men than women played sport. Overall 35% of men played sport compared to 23% of women. Younger men and women were more likely to play sport than older men and women. 56% of men aged 15-24 played sport compared to 43% of men aged 25-34. In contrast 39% of women aged 15-24 and 28% aged 25-34 played sport. 20% of men and 12% of women aged 65 and over played sport.

Government programs and sporting organisations are increasingly encouraging

Proportion of people who played sport, 1993



Source: Survey of Involvement in Sport

Sport and involvement

In this review *sport* is any physical competition, usually between individuals or teams, played according to a set of rules. The physical element may involve stamina, strength or skill. Sports involving animals (eg horse and dog racing) are excluded from the definition and this review. Although sport can be informal (eg cricket played at a family barbecue, fishing at the local beach) only formal sport (ie organised competition) is included in this review.

People can be *involved* in sport as players, non-players (eg coaches, referees, administrators) or spectators. People can be involved in more than one way (eg as a player and a spectator). People can also be paid or unpaid for their involvement; spectators can be paying or non-paying. Unless otherwise stated, 1993 data in this review refer to involvement by those aged 15 and over during the 12 months ended March 1993. Data for 1993-94 are averages of data collected over four periods during the year and refer to the involvement of people aged 18 and over. The reference period for players and non-players was the two weeks prior to interview while the reference period for spectators was the month prior to interview. The regularity of people's involvement is not known.

Proportion of people who played sport, 1993

State	Men	Women	Persons
	%	%	%
NSW	34.6	21.2	27.8
Vic.	35.0	23.7	29.2
Qld	35.0	24.1	29.5
SA	34.6	23.1	28.8
WA	38.3	25.3	31.8
Tas.	35.0	24.5	29.7
NT	42.5	24.2	33.6
ACT	43.1	25.7	34.3
Australia	35.3	23.1	29.1
	'000	'000	'000
Total	2 382.1	1 581.5	3 963.6

Source: Survey of Involvement in Sport

older people to participate in sport. It is recognised that regular exercise and a healthy diet can reduce the likelihood of developing health problems such as hypertension, stress, heart disease and obesity which affect older people more than younger people¹.

State comparison of players

The Australian Capital Territory and the Northern Territory had the highest proportions of people playing sport (34%) of all the states and territories. This was mainly due to the larger proportions of young people in the territories than in the states (see *Population — state summary table* p. 3). The territories also had the greatest difference in the proportions of men and women playing sport. In both the Australian Capital Territory and the Northern Territory 43% of men played sport. The proportions for women were 26% and 24% respectively.

New South Wales had the lowest proportion of people playing sport (28%) of any state, but had the largest number of players (1.3 million) because of its population size.

Players and employment status

People employed part-time, particularly men, were more likely to play sport than anyone else. This is related to the higher proportion of young people who were employed part-time. In 1993, 46% of part-time employed men and 30% of part-time employed women were players. This compared to 38% of full-time employed men and 27% of full-time employed women.

Overall, employed men were more likely to play sport than unemployed men, 39% compared to 30%, but there was little difference in the proportions of employed

Proportion of people who played sport, 1993

Labour force status	Men	Women
	%	%
<i>Employed</i>	38.8	28.0
Full-time	38.1	26.8
Part-time	45.6	29.6
Unemployed	29.8	24.8
Not in the labour force	27.9	17.8
Total	35.3	23.1

Source: Survey of Involvement in Sport

Proportion of people who played sport, 1993

Birthplace	Men	Women
	%	%
Australia	39.8	26.7
Overseas	23.6	13.1
MESC(a)	31.4	19.9
NESC(b)	18.3	8.4
Total	35.3	23.1

(a) Main English speaking countries.

(b) Non-English speaking countries.

Source: Survey of Involvement in Sport

and unemployed women who played sport, 28% and 25% respectively.

Men and women not in the labour force were the least likely to play sport, 28% and 18% respectively. However, 79% of those not in the labour force are aged 55 or over and they have low levels of sports participation.

Birthplace of players

People born in Australia were more likely to play sport than people born overseas. 40% of men and 27% of women born in Australia played sport, compared to 24% of men and 13% of women born overseas. Among the overseas born, those born in the main English speaking countries were twice as likely to play sport as those born in non-English speaking countries. The greater proportions of people playing sport who were born in Australia or the main English speaking countries may reflect the types of sport played in Australia.

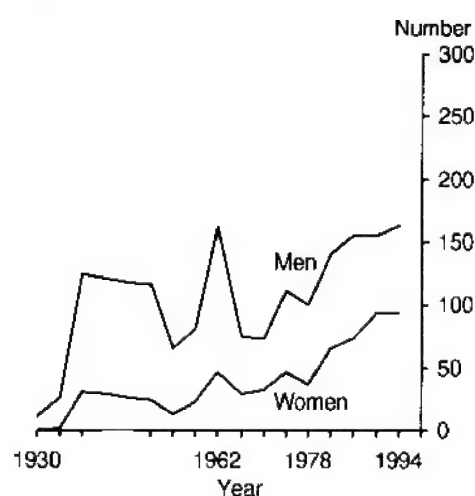
Elite athletes

International sports competitions, especially the Olympic and Commonwealth Games, provide the opportunity for Australian athletes to compete with other world class athletes.

At the first Commonwealth Games in 1930, 11 men represented Australia and won 8 medals. In the 1994 games, 256 Australian athletes, 94 of whom were women, competed. In these games Australian athletes won 182 medals, the highest ever medal tally and the most medals per competitor since 1970. 87 of the medals were gold².

Australia achieved its highest Olympic medal tally at the 1956 Olympic Games in Melbourne. In that year, 35 medals were won

Commonwealth Games competitors^(a)



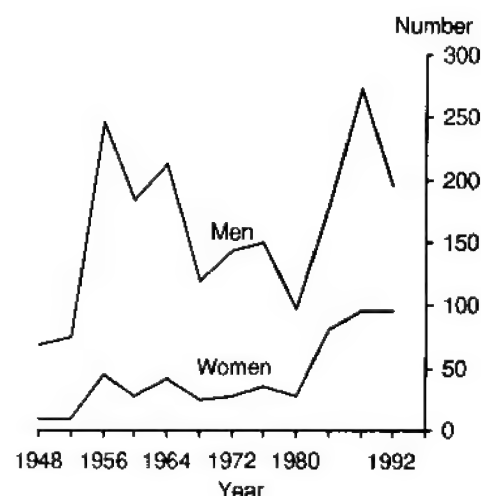
(a) There were no Commonwealth Games in 1942 or 1946.

Source: Australian Sports Commission unpublished data

between 289 competitors. Australia had its largest representation of athletes at the Olympic Games in 1988 when 368 athletes competed.

The participation of Australian women in the Olympic Games has increased since 1948, with women comprising 33% of Australian competitors in 1992 in contrast to 12% of competitors in 1948. Australian women at the Olympic Games have also been more successful overall than Australian men, winning twice as many medals per competitor as men over the period 1948-92.

Olympic Games competitors



Source: National Sport Information Centre *Olympic Facts*

Although Australians have won more medals in the Commonwealth Games than the Olympic Games, the recent performance of Australian athletes has raised expectations of success in the Sydney 2000 Olympic Games. The federal government has allocated \$135 million dollars over the next six years for the development and training of Australian athletes for the Sydney 2000 Olympic Games³.

Men		Women	
Type of sport	Players	Type of sport	Players
	'000		'000
Golf	303.9	Netball	301.1
Outdoor cricket	193.9	Tennis	162.1
Basketball	153.4	Golf	80.7
Australian rules football	151.4	Basketball	77.7
Tennis	137.1	Lawn bowls	75.2
Lawn bowls	115.3	Squash	46.3
Indoor cricket	91.6	Hockey	38.6
Squash	78.5	Indoor cricket	20.6
Rugby league	76.8	Outdoor cricket	15.8
Rugby union	48.7	Australian rules football	11.9

Source: Population Survey Monitor (annual average)

Types of sports played

The most popular sport played by Australians is golf. In 1993-94, on average, 384,600 people, of whom 79% were men, played golf in a two-week period. The next most popular sports were netball (336,200) and tennis (299,300).

The most popular sports for men of all ages were golf, then outdoor cricket, basketball and Australian rules football. Twice as many men played golf as played Australian rules football. For women netball was the most popular sport played, then tennis and golf.

More people aged 15-19 played basketball than any other sport. Netball was the next most popular sport for this age group. Netball was the most played sport by women aged 15-19.

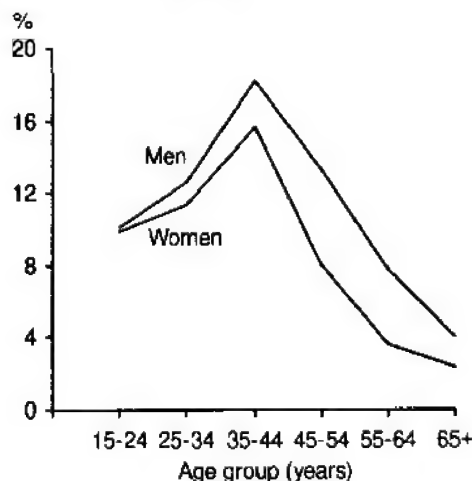
The most popular sports among those aged 55 and over were golf and lawn bowls. Lawn bowls was the sixth most played sport for all men and women.

Non-players

In 1993, one in ten Australians (1.4 million people) were involved in sport as non-players. About three in five of these non-players were also players. Overall, 12% of men and 9% of women were involved in sport as non-players, 4% as non-players only and the remainder (8% of men and 5% of women) as players and non-players.

Involvement as non-players was greatest for people aged 35-44, 18% of men and 16% of

Proportion of people involved as non-players, 1993



Source: Survey of Involvement in Sport

women. This is likely to be due to the non-playing involvement of parents supporting their children's sporting interests. Only 4% of men and 2% of women aged 65 and over were non-players.

Non-players may be involved in one or more roles. The most common role, in which 44% of non-players were involved, was as an administrator or committee member. 37% of non-players were coaches, instructors or teachers, and 30% were referees or umpires.

Why people did not play sport

The most common reason for not playing sport, given by 39% of men and 43% of women was injury or illness. Men were more likely than women not to play sport because of a sport's injury (19% compared to 13%) and women were more likely than men not to play sport because of an illness (20% compared to 11%). 27% of men and 20% of women said they had no time or were too busy to play sport.

Although women were five times more likely than men not to play sport due to lack of child care, fewer than 3% of women gave this as their main reason. Despite the costs associated with sport, such as membership, equipment and clothing, fewer than 1% of people said that expense or cost was the main reason they did not play sport.

Main reasons for not playing sport, 1993-94

Reasons	Men	Women
	%	%
Illness or injury	39.4	43.3
Sport injury	18.6	12.9
Illness	10.6	19.7
Other health problems	7.0	9.5
Work injury	3.2	1.2
No time/too busy	26.7	19.8
Weather problems	7.5	4.1
Transport	1.1	0.0
No child care	0.5	2.6
Expense/cost	0.5	0.9
Other	24.5	29.3
Total	100.0	100.0

Source: Population Survey Monitor (annual average)

Proportion of people who were paying spectators at sporting events, 1993-94

Age groups (years)	Men	Women	Persons
	%	%	%
18-19	37.8	21.9	30.1
20-24	18.9	25.0	21.9
25-39	27.3	11.4	22.3
40-54	26.5	18.2	22.4
55 and over	15.2	7.6	11.2
Total	23.5	15.9	19.7
	'000	'000	'000
Total	1 458.9	1 021.2	2 480.1

Source: Population Survey Monitor (annual average)

Spectators

In 1993-94, on average, 2.5 million people aged 18 and over paid to watch a sporting event in a month. Men were more likely than women, and younger people more likely than older people, to have been paying spectators. Among men, those aged 18-19 were most likely to be paid spectators at sporting events (38%) followed by those aged 25-39 (27%). Among women, those aged 20-24 were most likely to be paid spectators (25%) followed by those aged 18-19 (22%).

In 1992, men aged 15 and over who attended sporting matches as both paying or non-paying spectators spent 2 hours 39 minutes attending compared to 2 hours 19 minutes spent by women. Both men and women attended more sport on the weekend than weekdays⁴.

In 1993-94, 2.1 million people wanted to be a paid spectator at a sporting event but were unable to. Most of these were men (63%). Among men the most common reason for not attending, given by 60% of men who wanted to attend, was that they had no time available. Among women expense was the most common reason (37%).

Proportion of disabled persons involved in sport^(a), 1994

Age group (years)	Males	Females
	%	%
0-14	75.8	68.0
15-29	65.0	48.5
30-44	55.0	39.4
45-59	43.7	26.9
60-74	38.2	20.3
75 and over	25.7	10.9
Total	46.9	29.2

(a) Includes players, non-players and spectators.

Source: Survey of Disability, Ageing and Carers

People with a disability

In 1993, 38% of people with a disability who were able to leave their homes were involved in sport, either as a player, non-player or spectator. Men with a disability had greater involvement in sport than women with a disability, 47% compared to 29%. Younger people with a disability were more likely to be involved in sport than older people with a disability.

The Australian Sports Commission (ASC) is committed to assisting development of sporting opportunities for all Australians, improving access and equity in all aspects of sport. The ASC has stated that it will assist in staging the Sydney 2000 Paralympics and ensure that these events make a long-term and broad contribution to sport³.

In 1992, there were 136 competitors at the Barcelona Paralympics. In total, they won 76 medals, 24 of which were gold. Overall, Australia finished sixth in the medal tally.

Endnotes

- 1 Department of Sport, Recreation and Tourism Australian Sports Commission (1985) *Australian Sport: A Profile*.
- 2 Australian Sports Commission *unpublished data*.
- 3 Australian Sports Commission (1993-94) *Annual Report*.
- 4 Time Use Survey.

Related ABS publications

- ◆ Involvement in Sport, Australia (6285.0)
- ◆ Population Survey Monitor (4103.0)

Travel and tourism in Australia

SPECIAL FEATURE

The number of international visitors travelling to Australia has increased from 125,000 in 1963 to 3 million in 1993.

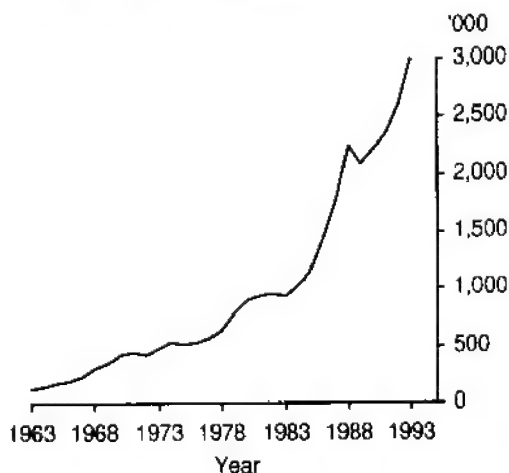
Both domestic and international travel and tourism in Australia are growing. The increasing accessibility of air travel has resulted in substantial growth in domestic and international tourism over the last 30 years. Improvements in road transport systems have also increased flexibility for domestic travellers.

The government has played a role in the growth of tourism by promoting Australia as an international tourist destination. Cultural and recreational events are important in attracting visitors from both within Australia and overseas. Recent examples are World Expo '88, Australia's Bicentennial and the annual Adelaide Grand Prix. The Sydney 2000 Olympics will generate a substantial increase in both domestic and international tourism.

International tourism

The number of international visitors to Australia has been increasing for many years. In 1963, 125,000 international visitors came to Australia. This had risen to 3.0 million by 1993 and the increase is expected to continue. The Bureau of Tourism Research has forecast that over 5 million overseas residents will visit Australia in 2001. Australia receives more world tourism than it generates. 3.0 million visitors travelled to Australia in 1993 compared to 2.3 million trips that Australians took overseas.

International visitors



Source: Overseas Arrivals and Departures

Tourism

Tourism consists of all short-term travel away from the usual place of residence, including that undertaken for business and pleasure. It includes both domestic and international travel.

International visitors are defined as overseas residents arriving in Australia intending to stay for periods of less than 12 months.

Data sources

Data on tourism in Australia are available from a number of different sources. The ABS collects monthly data about overseas arrivals and departures. The ABS also collects quarterly statistics on tourist accommodation.

The Bureau of Tourism Research (BTR) conducts two regular tourism surveys. In the International Visitor Survey, international visitors aged 15 and over are interviewed at Australia's major airports as they are leaving Australia. The Domestic Tourism Monitor is a household survey of domestic travel undertaken by Australians aged 14 and over. In 1992, BTR also conducted the Domestic Tourism Expenditure Survey. Accurate data on the activities and expenditure of domestic and international tourists are difficult to collect. This is because the surveys rely on the tourists' recollections of activities and expenditure for up to 12 months previously. Consequently the data collected do not always reflect all aspects of their travel accurately.

International visitors

Over one-fifth of international visitors to Australia in 1993 came from Japan. This was followed by New Zealand, UK and Ireland, and the United States. Visitors from these countries accounted for 59% of all international visitors. Over the past five years the number of visitors from Asia has more than doubled.

In 1993, 54% of visitors to Australia were aged under 40. In comparison, 66% of all visitors from Japan were aged under 40. There were slightly more male than female international visitors in 1993.

63% of international visitors reported that the main reason for their visit to Australia was for a holiday, and a further 18% came to visit relatives. However, purpose of visit varies with country of origin. The majority (92%) of

International visitors: purpose of visit by country of residence, 1993

Country of residence	Holiday(a)	Visiting relatives	Business, employment	Attending convention	Other(b)	Total	Total visitors
	%	%	%	%	%	%	'000
Japan	92.2	1.3	3.9	0.2	2.4	100.0	670.8
New Zealand	45.4	27.8	15.8	1.8	9.2	100.0	499.3
UK & Ireland	43.9	42.6	8.7	0.9	3.9	100.0	321.3
United States	56.6	13.7	17.1	4.6	8.1	100.0	281.3
Singapore	76.2	8.9	7.7	1.2	5.8	100.0	154.9
Taiwan	80.3	8.6	4.6	0.5	6.0	100.0	108.7
Germany	76.1	11.8	6.0	0.8	5.3	100.0	105.6
All countries	63.1	17.7	9.8	1.7	7.8	100.0	2 996.2

(a) Includes people accompanying business travellers.

(b) Includes in transit and not stated.

Source: Overseas Arrivals and Departures

Japanese visitors stated holiday as the main reason for their visit. While only 44% of visitors from UK and Ireland reported this reason, a further 43% reported that visiting relatives was the main reason for their visit. This reflects the high proportion of Australian residents with forebears from UK and Ireland (see Australian Social Trends 1994 pp. 9-12 *Birthplaces of Australian settlers*).

International visitors' accommodation

The 1993 International Visitor Survey found that most international visitors spend at least one night in a hotel (62%), or with friends or relatives (38%). This is related to country of origin and purpose of visit. Japanese visitors were the most likely to stay in a hotel (95%), while those from UK and Ireland were most likely to stay with friends or relatives (72%).

Length of stay of international visitors

In 1993, international visitors stayed in Australia for an average of 23 nights. However, length of stay varies by the country of origin and the purpose of the trip. Visitors from Japan stayed an average of 7 nights, reflecting a holiday purpose. Visitors from UK and Ireland stayed for an average of 41 nights, reflecting both the purpose of visiting relatives and the longer distance travelled.

Expenditure by international visitors

The amount of money international visitors spend while in Australia varies with length of stay and type of trip. The average expenditure by international visitors to Australia in 1993 was \$1,787 a trip, split almost equally between shopping; food, drink and accommodation; and other expenditure such as car hire, additional travel, entrance to attractions etc. Visitors from Germany spent on average \$2,773 a trip. Visitors from the United States spent, on average, \$2,000 a trip, almost half of this on food, drink and accommodation. In contrast, Japanese visitors spent, on average, \$1,388 a trip, almost three-quarters of which was spent shopping. This reflects the high proportion of Japanese

Average expenditure^(a) by international visitors, 1993

Country of residence	Shopping	Food, drink and accommodation	Total
	\$	\$	\$
Germany	495	1 053	2 773
United States	370	918	2 000
UK & Ireland	446	861	1 914
Japan	1 018	206	1 388
New Zealand	411	412	1 119
All countries	618	581	1 787

(a) Does not include expenditure by visitors on inclusive package tours purchased outside Australia.

Source: Bureau of Tourism Research *International Visitor Survey*

tourists who visit Australia on pre-paid package tours.

Leisure activities of international visitors

International visitors participated in a wide variety of leisure activities during their visits to Australia. The most popular leisure activity for international visitors was going to a zoo, animal or marine park. Over half of all international visitors went to such a park in 1993. Sporting activities included swimming and surfing (31%), bushwalking (14%) and scuba diving and snorkelling (13%). Overall, international visitors were more likely to visit parks and gardens than to participate in sporting activities while in Australia.

The type of activities that international visitors participate in varies with country of origin. Japanese visitors were the most likely to go to a zoo, animal or marine park (76%), while visitors from Germany were the most likely to visit national/state parks (69%).

The type of activities that international visitors participate in is also affected by the purpose of their trip. In 1993, those visitors in Australia for a holiday were more likely to visit zoos, animals and marine parks (63%) than those in Australia for any other purpose. Those visiting friends and relatives were most likely to visit national/state parks (48%). Visitors in Australia for business were less likely to participate in leisure activities than those travelling for any other reason.

Domestic tourism

In 1992-93, domestic travellers took 47.9 million trips. While there was an increase of 7% in the number of domestic trips taken

Domestic tourism

The Bureau of Tourism Research defines *domestic tourism* as travel by Australian residents involving a stay away from home for one or more nights and requiring a journey of at least 40 kilometres from home, undertaken for any reason. It includes both interstate and intrastate travel.

An *interstate trip* is a trip taken by an Australian resident within Australia other than in the state/territory in which he/she resides. An *intrastate trip* is a trip taken by an Australian resident within the state/territory in which he/she resides. The *main destination* of a trip is the place on the journey where the most nights were spent.

Top ten leisure activities of international visitors(a), 1993

Type of activity	Visitors	Participation
	'000	%
Visit a zoo, animal or marine park	1 429	51.3
Visit a national/state park	1 237	44.4
Historical/heritage buildings, monuments	1 193	42.9
Swimming/surfing	865	31.1
Visit botanical gardens	786	28.2
Visit art galleries or museums	671	24.1
Amusement/theme parks or agricultural shows	610	21.9
Bushwalking	384	13.8
Scuba diving/snorkelling	366	13.1
Craft workshops/studios	313	11.2

(a) People aged 15 and over.

Source: Bureau of Tourism Research *International Visitor Survey*

between 1984-85 and 1992-93, there was a decrease in the number of domestic trips taken per person, from 3.7 to 3.4. Domestic travellers were most likely to travel by private car (78%).

Domestic tourism consists of both interstate and intrastate trips. In 1992-93 most domestic travel was intrastate (76%). Consequently, and largely because of the size of the populations, 32% of domestic trips took place in New South Wales and 1% took place in the Northern Territory.

In 1992-93 fewer people travelled to Victoria, South Australia and Western Australia than travelled from these states. Victoria generated 26% of interstate trips and received 19%, South Australia generated 10% and received 8% and Western Australia generated 4% and received 3%.

Domestic trips(a)

Year	Interstate	Intrastate	Total trips
	'000	'000	'000
1984-85	9 996	34 824	44 820
1988-89	11 645	34 316	45 961
1992-93	11 638	36 234	47 878

(a) People aged 14 and over.

Source: Bureau of Tourism Research *Domestic Tourism Monitor*

Domestic trips^(a), 1992-93

State	Interstate		Intrastate	Total trips taken in state ^(b)	
	Origin	Destination			
	'000	'000	'000	'000	%
NSW	3 745	4 261	11 080	15 341	32.0
Vic.	3 007	2 182	7 449	9 631	20.1
Qld	1 897	2 219	8 385	10 604	22.2
SA	1 218	894	2 879	3 774	7.9
WA	423	332	4 746	5 079	10.6
Tas.	269	337	1 415	1 752	3.7
NT	88	319	268	587	1.2
ACT	992	1 093	10	1 103	2.3
Australia	11 638	11 638	36 234	47 878^(c)	100.0

(a) People aged 14 and over.

(b) Number of interstate trips to a state/territory plus number of trips within the state/territory (intrastate trips).

(c) Includes destination not stated.

Source: Bureau of Tourism Research *Domestic Tourism Monitor***Domestic travellers**

In 1992-93 men made almost 20% more domestic trips than women. This reflects their greater likelihood of travelling on business. The most common purpose of domestic trips was pleasure/holidays (39%). A further 29% were taken to visit friends and relatives. More women than men travelled to visit their friends and relatives.

Reasons for domestic travel^(a), 1992-93

Primary purpose of trip	Men	Women
	%	%
Pleasure/holiday	36.7	41.2
Visiting friends/relatives	23.9	35.5
Business	23.5	7.9
Other ^(b)	15.9	15.3
Total	100.0	100.0
	'000	'000
Total trips	26 063	21 815

(a) People aged 14 and over.

(b) Includes purpose not stated and other purposes not separately recorded.

Source: Bureau of Tourism Research *Domestic Tourism Monitor***Domestic tourist accommodation**

Domestic tourists spent an average of 4 nights away from home while travelling in 1992-93. The main type of accommodation used was a friend's or relative's house or flat (44%). Next most popular were hotels or motels (20%) and rented houses or flats (7%).

The purpose and destination of a trip affected the type of accommodation used. For example, those visiting the Northern Territory were more likely to be travelling for pleasure/holiday, and therefore less likely to have stayed with friends or relatives than those travelling in other states.

Domestic tourist expenditure¹

Domestic tourists aged 14 and over spent approximately \$29.3 billion in 1992. The average expenditure per trip was \$395. However, this amount varied depending on the type, purpose, main destination and length of the trip. The average amount spent by those taking interstate trips was more than three times that of intrastate travellers. Business travellers spent more than those travelling for any other reason.

Domestic travellers who took a trip in Victoria spent the least amount per trip, an average of \$300, while the average expenditure of those travelling in the Northern Territory was \$2,066. However, people travelling to the Northern Territory were less likely to stay

Selected leisure activities of domestic travellers^(a), 1990–91^(b)

Leisure activity	Travellers	Participation
	'000	%
Swimming/surfing	1 962	39
Fishing/boating	1 247	25
Bush activities	1 007	20
Visiting a national/state park	824	17
Visiting heritage sites	660	13
Sporting events	536	11
Theme park	380	8
Visiting an art gallery	305	6
Attending live theatre	138	3
Attending musical/opera	75	2

(a) People aged 14 and over.

(b) December 1990–April 1991.

Source: The Australia Council *Culture on Holiday, A Survey of Australian Domestic Tourists' Cultural Participation, December 1990–April 1991*

with friends or relatives, and more likely to use air travel and stay away for longer than people visiting other states.

Leisure activities of domestic travellers

The types of leisure activities undertaken by domestic travellers vary with factors such as main destination, the length of the trip, the purpose of the trip and the time of year that the travel takes place. Overall, leisure activities undertaken by domestic travellers are relatively expensive compared to leisure activities undertaken at home (see *Leisure at Home*, pp. 164–167).

In 1990–91, 78% of domestic travellers participated in leisure activities. The most popular leisure activity was swimming and surfing, undertaken by almost 2.0 million travellers (39%). The next most popular leisure activities were fishing or boating (25%), bush activities (20%), visiting a national or state park (17%), visiting heritage sites (13%) and attending sporting events (11%).

Related ABS publications

- Overseas Arrivals and Departures, Australia (3404.0)

Day trips^(a), 1992–93

Type of day trip	People ^(b)	Participation
	'000	%
Visit friends or relatives	6 702	47.8
Pleasure driving (50km round trip)	6 524	46.5
Attend special events	2 469	17.6
Participate in sport/recreational activity	2 197	15.7
Visit theatre, opera, ballet, concert or cinema	2 127	15.2
Visit animal parks, wildlife reserves, zoos	2 105	15.0
Business trip	1 597	11.4
Visit entertainment/theme parks	1 525	10.9
Conference/seminar/study tour or school excursion	1 494	10.7
Visit museums/art galleries	1 231	8.8
All types of day trip	10 970	78.2

(a) People aged 14 and over.

(b) People who took each type of day trip at least once in the year.

Source: Bureau of Tourism Research *Domestic Tourism Monitor*

Domestic day trips

Day trips are trips away from home which do not involve an overnight stay but which are of at least four hours duration. In 1992–93, 78% of Australians aged 14 and over took one or more day trips. Almost half of these people took a day trip to visit friends and relatives. Age and family type affected the type of day trip people undertook. For example, dependent children aged 14–17 were more likely than any other group to take a day trip to visit an entertainment or theme park (18%) or participate in a sporting/recreational activity (24%), while people aged 18–34 with children at home were more likely to go to animal parks, wildlife reserves or zoos (25%). People aged 55 and over who lived alone were least likely to take a day trip.

Endnotes

- Bureau of Tourism Research (1993) *Domestic Tourism Expenditure 1992 Survey Results Summary*.

Culture-leisure workers

SPECIAL FEATURE

In 1992-93, 1.6 million people did some work in culture-leisure. Most of these people did not receive payment for their work.

Australians are consumers of a wide variety of culture and leisure products and services. The workers who produce these products and services are largely unpaid. For example, public radio, music and community culture activities are particularly reliant on volunteers¹. Consequently there is often a shortage of workers in culture and leisure.

Culture-leisure workers

In 1992-93, 896,000 women and 705,000 men did some work in culture-leisure (13% of women and 10% of men aged 15 and over). Women who worked in culture-leisure were more likely to be unpaid than men, 68% compared to 61%. This is consistent with the tendency for women to undertake more of the unpaid work in society generally (see Australian Social Trends 1994 pp. 120-125 *Unpaid household work*).

The greatest proportion of culture-leisure workers were aged 35-44. There were equal proportions of both male and female culture-leisure workers in this age group (28%). Only 19% of culture-leisure workers were aged 15-24.

Many people did more than one type of work in culture-leisure. The average number of different types of work per worker was 1.7. People who did only paid work averaged 1.9 types of work compared to 1.6 for those who did only unpaid work and 1.5 for those who did both. For many workers, their work in culture-leisure was not their main job.

Culture-leisure

Culture-leisure in this review is restricted to the scope of the National Culture-Leisure Industry Statistical Framework, 4th edition, 1991. This framework presents culture-leisure as an industry and covers those aspects of culture and leisure which fall within the scope of the portfolio of responsibilities of the Cultural Ministers Council. As such it includes areas such as national heritage, museums, literature, libraries and archives, music, performing arts, visual arts, film and video, radio, television, community activities, education, festivals and administration, and natural environment. While sport is included in the framework it is not part of the Cultural Ministers Council's portfolio and is thus excluded from this review. Areas of culture such as religion and areas of leisure such as tourism are excluded from the framework.

The culture-leisure industry is all those industries selected as being involved in the production of culture and leisure products and services. The selection of these industries is based on the areas included in the National Culture-Leisure Industry Statistical Framework, 4th edition, 1991.

Work in culture-leisure refers to paid or unpaid work in the culture-leisure industry, which was used by, or benefited, people other than the worker or the worker's family. Workers may undertake more than one type of work. Work refers to the type of work done (eg as a writer) and not individual pieces of work (eg books). *Employment in culture-leisure* refers to any paid work in the culture-leisure industry undertaken as a main job. *Cultural occupations* are those where the majority of people in that occupation are employed in the culture-leisure industry.

Percentage of workers in culture-leisure, 1992-93

Type of work	Men	Women	Persons
	%	%	%
Paid work only	19.5	15.6	17.3
Unpaid work only	61.3	68.5	65.3
Paid and unpaid work	19.3	15.9	17.4
All work	100.0	100.0	100.0
	'000	'000	'000
Total workers	704.8	895.9	1 600.7

(a) Aged 15 and over.

(b) During the 12 months ending March 1993.

Source: Survey of Work in Selected Culture/Leisure Activities

Time spent working

Three-quarters of all types of culture-leisure work consisted of less than 10 hours a week. However, the time spent working depended on whether the work was paid. 17% of types of work for which some payment was received lasted for 35 hours or more a week, compared to only 1% of unpaid types of work.

The average number of weeks spent working also varied according to whether any payment was received. 22% of all unpaid types of work lasted longer than 26 weeks during the year. However, for types of work where some payment was received, 51% lasted longer than 26 weeks.

Type of work

The overall participation rate in culture-leisure work was 118 per 1,000 population aged 15 and over. Organising fetes and festivals was the most common type of work with a participation rate of 32 per 1,000 population. This was followed by teaching cultural activities (21 per 1,000) and writing and publishing (20 per 1,000).

Participation in paid work only was most likely to be in teaching cultural activities (8 per 1,000) or writing and publishing (5 per 1,000). Participation in unpaid work only was most likely to be in organising fetes and festivals (30 per 1,000) or in performing arts (13 per 1,000).

Both men and women were more likely to participate in organising fetes and festivals than in any other type of work (26 per 1,000 and 39 per 1,000 respectively). For men writing and publishing was next most common type of work with a participation rate of 23 per 1,000 men. For women it was teaching cultural activities at 26 per 1,000 women.

Cultural occupation groups

Included in the number of people who did some work in culture-leisure are those who were employed in the culture-leisure industry as their main job. Information on this group is only available from the Census of Population and Housing because the definitions of the culture-leisure industry and of cultural occupations require data at a level of detail too fine for reliable estimates from sample surveys. Data in 1986 were coded at a broader level than in 1991 and time series

Participation rate^(a) in types of culture-leisure work, 1992-93^(b)

Type of work	Paid only rate	Unpaid only rate	Paid & unpaid rate	Total rate
Fete/festival organising	1.0	30.3	1.3	32.5
Teaching cultural activities	8.1	8.8	3.9	20.9
Writing/ publishing	5.3	10.3	4.5	20.1
Music(c)	1.7	12.0	3.3	17.0
Performing arts(c)	1.1	13.3	1.4	15.8
Art/craft show organising	0.6	8.3	0.9	9.9
Textiles	1.2	4.1	1.7	7.0
Drawing	1.8	3.5	1.7	7.0
Design	2.5	2.2	1.7	6.4
Libraries/ archives	2.7	2.6	1.0	6.3
All types of work	20.3	76.9	20.5	117.7

(a) Rate per 1,000 population aged 15 and over.

(b) During the 12 months ending March 1993.

(c) Includes those who were not live performers.

Source: Survey of Work in Selected Culture/Leisure Activities

comparisons are therefore restricted to occupation groups.

Between 1986 and 1991 there was a 12% increase in the number of people employed in cultural occupation groups, 7% for men and 23% for women. Over the same period, the total number of employed people increased by 9%. The cultural occupation group which showed the largest increase in employment was authors and related professionals (49%). This was followed by painters, sculptors and related professionals (37%), and craftworkers (30%). The two occupation groups with decreases in employment between 1986 and 1991 were performing arts support workers, which fell by 10%, and architects and landscape architects, which fell by 4%.

Cultural occupations

In 1991, almost 183,000 people were employed in the culture-leisure industry. Of these, 119,500 people were employed in cultural occupations, 2% of all those employed. The other 63,200 people were employed in non-cultural occupations in the culture-leisure industry (eg a carpenter employed by a dance group to make sets). Of those employed in cultural occupations in

cultural industries, 16% were in creative arts, 14% in libraries, 13% in television stations, and 10% in live theatre, orchestras and bands.

30% of those employed in cultural occupations were aged 25–34 compared to 16% aged 15–24. This age distribution was similar to that of all employed people.

37% of people who were employed in a cultural occupation had qualifications in a culture related field such as music, visual and performing arts, literature, graphic design, architecture, interior design and communication.

In 1991, 9% of people employed in cultural occupations were librarians. A further 7% each were library assistants, architects, graphic designers, and reporters.

Women made up a greater proportion of people employed in cultural occupations than in all occupations (48% compared to 43%). In particular women were more likely than men to work in libraries. In 1991, women accounted for 83% of all librarians, 87% of all library assistants and 88% of all library technicians. Women were also more likely to work as private music teachers than men. Men were more likely than women to work as architects, graphic designers, reporters, photographers, instrumental musicians or architectural associates.

Top ten cultural occupations, 1991

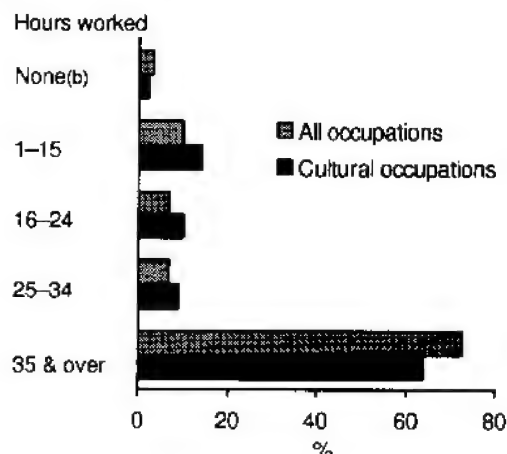
Cultural occupations	Men '000	Women '000	Persons '000
Librarian	1.8	8.7	10.5
Library assistant	1.2	7.7	8.8
Architect	7.6	1.1	8.7
Graphic designer	4.8	3.9	8.6
Reporter	5.1	3.9	8.5
Private music teacher	1.5	4.0	5.5
Photographer	3.9	1.3	5.2
Instrumental musician	4.0	1.1	5.2
Architectural associate	3.7	0.7	4.4
Library technician	0.4	3.3	3.7
All cultural occupations	62.0	57.5	119.5

Source: Census of Population and Housing

Related ABS publications

- ◆ Work in Selected Culture/Leisure Activities, Australia (6281.0)
- ◆ Employment in Selected Culture/Leisure Occupations, Australia (6273.0)

Hours worked^(a) by employed people, 1991



(a) Refers to hours worked in previous week. Not stated responses have been excluded from the calculations.

(b) Includes people on holidays, sick leave, on strike, temporarily stood down etc.

Source: Census of Population and Housing

Hours worked

The majority (64%) of people who were employed in cultural occupations as a main job worked 35 hours or more a week. However, this was a smaller proportion than for all occupations. 24% of people employed in cultural occupations worked 1–24 hours a week, compared to 17% for all occupations.

Cultural occupations consisting mainly of people who worked less than 35 hours included entertainment ushers, private music teachers, popular singers, private drama teachers and private dance teachers. In comparison, more than 85% of cadet journalists, media producers, architects, casting directors, film or stage directors, and art directors worked 35 hours or more.

Endnotes

- 1 Cultural Ministers Council Statistical Advisory Group (1991) *The Australian Cultural Industry: A Summary of 1988 Cultural Statistics*.

Leisure at home

SPECIAL FEATURE

On average, people spent nearly 4 hours a day on home leisure activities in 1992. Participation in home leisure activities generally increased with age.

The emergence of a leisured society in industrialised nations has been predicted since the early 1970s¹. Such a society is characterised by increased participation by all people in cultural and leisure activities. Much of this increased participation in, and time spent on, leisure can be expected to occur in the home. In 1992 people spent just over half of their total leisure time at home on an average day.

Participation in home leisure

Home leisure activities are generally non-physical or passive. They are relatively inexpensive, generally accessible at times which suit the participant, and the amount of time spent on them is easily managed. These general characteristics affect participation in home leisure activities.

In 1992, 95% of people participated in some home leisure activity on an average day. Participation in home leisure activities generally increased with age. This may be because most home leisure activities are passive in nature, inexpensive and do not require access to transport.

Watching television (TV) was the most popular home leisure activity. 71% of people watched TV at home on an average day. Although watching TV was popular among all

Home leisure

Leisure time is defined as the free time people have for pursuits other than those which are necessary (eg sleeping), contracted (eg paid employment), or committed (eg housework). Unpaid work such as gardening and home maintenance are not classified as leisure in this review.

Leisure activities undertaken at home include watching television or videos, relaxing, socialising, listening to music and participating in arts, crafts and hobbies. Sometimes these activities are done together with another activity, eg ironing while watching television or studying while listening to the radio. In such cases the ironing or studying are usually classified as the main activity and the leisure activity is secondary. Secondary activities have been excluded from this review.

The main data source for this review is the 1992 Time Use Survey which collected information about participation in, and time spent on, home leisure activities by people aged 15 and over. In the Time Use Survey, participation rates measure the proportion of people participating in an activity on an average day. Therefore they best reflect participation in the most common, everyday home leisure activities. Those leisure activities which occur mainly at weekends, or only infrequently, eg arts, crafts, hobbies and watching videos, will have relatively low participation rates on an average day basis.

Participation in selected home leisure activities, 1992

Activity	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	All persons
	%	%	%	%	%	%	%
Watching TV	66.7	67.9	67.3	71.0	73.8	81.1	70.5
Relaxing/thinking	48.8	53.4	52.5	55.0	58.9	68.1	55.1
Socialising (having visitors)	19.1	20.4	19.5	18.9	23.6	25.8	20.8
Reading newspapers	7.6	14.1	18.9	24.3	31.9	40.4	20.8
Listening to radio	5.5	5.1	5.4	7.5	11.7	18.7	8.2
Arts, crafts, hobbies	1.2	2.6	2.6	5.1	8.6	11.2	4.5
Exercise at home	4.1	3.8	3.6	3.1	4.6	7.3	4.3
Watching videos	5.3	6.2	4.1	3.6	2.6	1.6	4.2
Indoor games	2.0	1.9	1.9	3.1	3.8	8.9	3.3
Playing computer games	3.6	1.6	1.2	0.8*	**	**	1.5
Listening to recorded music	1.4	1.1	0.6*	0.6*	1.3*	1.9	1.1
All home leisure	92.0	93.8	94.7	95.4	95.9	97.1	94.5

Source: Time Use Survey

age groups, proportionally more older people watched than younger people. 55% of people spent some time relaxing on an average day. As with watching TV, older people engaged in this activity more than younger people.

21% of people participated in each of socialising at home (having visitors) and reading newspapers, but participation patterns varied across age groups. The proportion of people who socialised ranged between 19% of those aged 45–54 and 26% of those aged 65 and over. Reading newspapers was relatively uncommon among young people, with 8% of those aged 15–24 participating. The proportion of people reading newspapers increased with age, reaching 40% among those aged 65 and over.

8% of people listened to the radio as a main activity on an average day. It is likely that many more people actually listened to the radio but they did so as a secondary activity while doing something else.

Watching videos and playing computer games were more popular with younger people than older people but they had relatively low overall participation rates. This is partly because these activities do not tend to be undertaken daily.

Time spent on home leisure activities

In 1992 people who spent time on home leisure spent an average of nearly 4 hours a day with little difference between men and women. People aged 65 and over who engaged in home leisure spent 77% of their

Average time spent on selected home leisure activities by participants, 1992

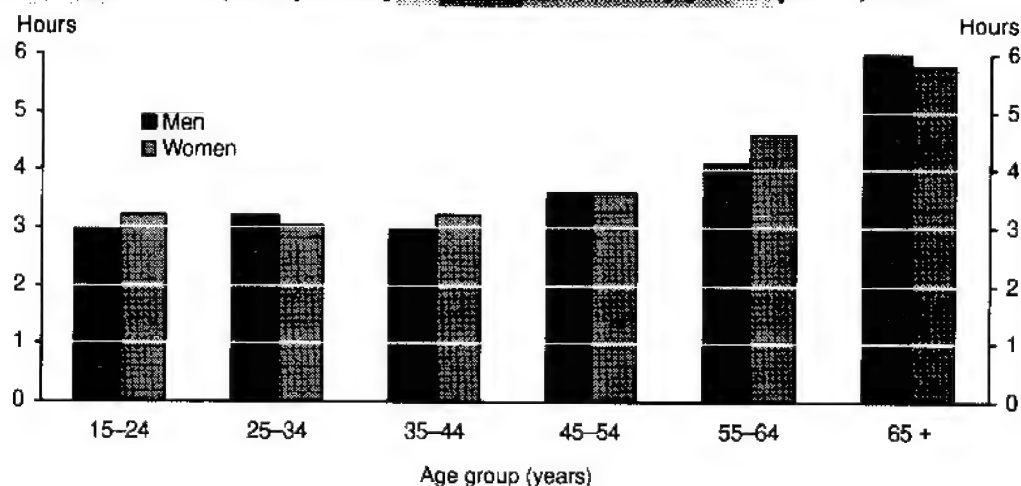
Activity	Men mins/day	Women mins/day	Persons mins/day
Watching TV	155	132	143
Arts, crafts, hobbies	131	113	114
Socialising (having visitors)	102	101	101
Watching videos	107	92	100
Playing computer games	92	74	86
Indoor games	68	58	62
Relaxing/thinking	61	61	61
Listening to recorded music	67	43	58
Listening to radio	48	41	44
Reading newspapers	47	36	42
Exercise	34	33	34
All home leisure	234	236	235

Source: Time Use Survey

daily leisure time at home. This represented almost 6 hours a day. In comparison, people aged 15–24 who engaged in home leisure spent 51% of their daily leisure time at home, representing about 3 hours a day.

People who watched television did so for an average of 2 hours and 23 minutes a day, 2 hours and 35 minutes for men and 2 hours and 12 minutes for women. While watching

Average time spent per day on home leisure by participants, 1992



Source: Time Use Survey

TV is accessible, inexpensive and passive, its popularity perhaps also lies in its ability to cater for a wide range of audience tastes and preferences. People aged 65 and over who watched TV spent the most time on this activity, 3 hours and 9 minutes a day. Those aged 35-44 spent the least time watching, 2 hours and 5 minutes a day. People who watched TV as a secondary activity while doing something else did so for an average of 1 hour a day.

People who spent time socialising engaged in this activity for an average of 1 hour and 41 minutes a day. Time spent on socialising was about the same for all age groups and both men and women. While only 1% of men and 8% of women participated in arts, crafts or hobbies on an average day, those who did so spent a relatively long time on this activity. Men spent an average of 2 hours and 11 minutes a day and women spent an average of 1 hour and 53 minutes a day. People who listened to recorded music, listened to the radio, read newspapers or exercised at home spent an average of less than 1 hour a day on these activities.

Home leisure products

Throughout the 20th century, technological advances have been used to develop new home leisure products. These products have played an important role in shaping patterns of leisure consumption in the home. For example, the widespread use of radio from the 1930s, television from the 1950s, and video cassette recorders (VCRs) and personal computers (PCs) from the 1980s and 1990s have fundamentally altered the home leisure landscape.

The further potential for change resulting from the latest developments in interactive multi-media is reflected in the government's 1994 cultural policy statement, *Creative Nation*, which states 'Interactive multi-media has the potential to become a new force in education, art, culture and service, and the biggest information business in the world.'² Since the introduction of television in Australia in 1956, the number of households with TV sets has increased steadily. By 1991, 99% of households had at least one TV set. The high rate of TV penetration reflects the medium's ability to cater for a wide audience. Watching TV is also a largely passive and low cost activity allowing participation by virtually everyone. Patterns of TV watching are easily managed, particularly since the introduction of the VCR. The home TV set is also

International comparison

Australian households have high rates of colour TV and video cassette recorder (VCR) ownership when compared to other OECD countries. Canada has a relatively low rate of TV ownership and France and the Netherlands have low rates of ownership of VCRs.

Households with colour TVs and VCRs, 1991

Country	Colour TVs	VCRs
	%	%
Australia	98	72
Canada	84	70
France	92	52
Japan	99	70
Netherlands	96	52
New Zealand	97	64
Sweden	94	63
United Kingdom	94	72
United States	98	71

Source: Screen Digest Ltd (1992) *Screen Digest*

increasingly the core of a complete home entertainment system.

VCR ownership increased slowly in the late 1970s and early 1980s as video technology developed. However, between 1981 and 1993 the percentage of households with VCRs increased from 3% to 80%. During this time the number of households with VCRs grew

Households with TVs, VCRs, CDs and PCs

Year	TVs(a)	VCRs	CDs	PCs
	%	%	%	%
1956	1	n.a.	n.a.	n.a.
1961	55	n.a.	n.a.	n.a.
1966	87	n.a.	n.a.	n.a.
1971	91	n.a.	n.a.	n.a.
1976	92	0	n.a.	n.a.
1981	92	3	n.a.	n.a.
1986	93	49	4	n.a.
1991	99	72	22	26
1993	99	80	33	29

(a) Includes black and white television sets.

Source: Bureau of Transport and Communications Economics (1994) *Statistical summary of the Communications, Entertainment and Information Industries*

from about 150,000 to almost 4.5 million and the number with two or more VCRs grew from 10,000 to 437,000.

The increased ownership of VCRs is related to their increasing affordability and the availability of feature films in video format. In 1976 the average price of a VCR was \$4,684 in 1989-90 dollars. By 1993 the average price in 1989-90 dollars had decreased to \$446. In 1978 there were only two feature film titles available on video; by 1993, 33,000 titles were available.

Household ownership of compact disc players (CDs) grew steadily from 4% in 1986 to 33% in 1993. In 1984, 390,000 discs were sold. In 1992, just over 26.5 million discs were sold.

Household ownership of PCs increased from 26% in 1991 to 29% in 1993. In this time the number of PCs in homes grew from 151,000 to 175,000. In 1994, 18% of households had a PC dedicated to games and used regularly by household members³.

Related ABS publications

- ◆ How Australians Use Their Time — Selected Findings from the 1992 Time Use Survey, Australia (4153.0)

Endnotes

- 1 Bell, D. (1974) *The coming of post-industrial society: a venture in social forecasting* Heinemann.
- 2 *Creative Nation* (1994) Government Cultural Policy Statement.
- 3 Household Use of Information Technology (8128.0).

Household pets

SPECIAL FEATURE

In 1994, there were almost as many domestic pets in Australia as people. Two in every five households owned a dog and one in every four owned a cat.

There were an estimated 17.8 million household pets in Australia in 1994. Three in every five households had at least one pet. Reasons why households keep pets include companionship, recreation and protection.

Pet ownership

In 1994, the most common pets were birds (6.0 million), fish (4.3 million), dogs (3.1 million) and cats (2.5 million). Although more birds and fish were kept than dogs or cats, more households had a dog (38%) or cat (27%) than had a bird (16%) or fish (9%). This is because people who keep birds or fish are more likely to keep several of them than people who keep dogs or cats. 57% of households who kept fish and 35% of households who kept birds had three or more compared to 4% of households who kept dogs and 9% of households who kept cats. Some of the more unusual pets were spiders, frogs and peacocks.

Households with young children (aged 0-4) were less likely to keep pets than households with school-age children. The proportion of households with pets generally increased with the age of the oldest child. Three-quarters of households where the oldest child was aged 10-14 kept pets.

Married couples with dependants were the most likely of all household family types to have pets. A half of these households owned a

Feral and domestic animals

The term *domestic* applies to those animals that live closely with or depend on humans. Domestic animals and their descendants which have gone wild are known as *feral* animals. Most of the problems associated with feral animals in Australia arise because they can rapidly increase in numbers without natural predators or diseases to control them.

Domestic cats continually feed into the stray and feral populations. While the number of domestic cats in Australia has been estimated, it is difficult to estimate the number of feral cats due to lack of research. One estimate suggests that the feral cat population could be between 5.6 million and 18.4 million¹.

Stray or feral dogs are a threat to livestock, in particular, sheep. This is especially the case where suburbia is close to farmland. The most common control methods are exclusion fences, poisoning and trapping.

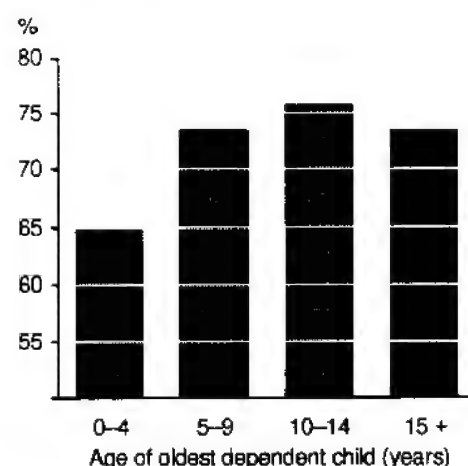
dog, a third owned a cat and a fifth owned birds. People aged less than 35 who lived alone were the least likely to keep a pet (30%). People aged 60 or more who lived alone were least likely to have a dog (16%) or fish (less than 1%). But they were more likely than people who lived alone aged less than 35 to have a cat or birds.

Pet ownership, 1994

Types of pets	Pets	Households with pets
	'000	%
Dogs	3 133.6	37.5
Cats	2 479.0	26.7
Birds	6 021.4	15.9
Fish	4 296.9	8.6
Rabbits	337.0	1.7
Chickens	905.7	1.0
Guinea pigs	184.3	1.0
Horses	157.1	1.0
Other	312.4	2.0
All pets	17 827.4	59.2

Source: Population Survey Monitor

Proportion of households with pets, 1994



Source: Population Survey Monitor

Households by type of pet, 1994

Household family type	Dogs	Cats	Birds	Fish	All pets
	%	%	%	%	%
Married couple with dependants	49.0	32.9	21.0	16.0	74.0
Other married couple	37.3	25.7	16.3	5.4	59.4
Lone parent with dependants	41.1	29.5	11.4	7.5	62.2
Lone person aged less than 35	18.9	7.9	5.6	2.8	30.2
Lone person aged 60 or more	15.8	15.4	8.9	0.4	32.3
All household family types	37.5	26.7	15.9	8.6	59.2

Source: Population Survey Monitor

Dogs and cats

Dwelling type and available space may influence the type of pet a household keeps. 43% of households living in a separate house owned a dog and 30% owned a cat. Households not living in separate houses were slightly more likely to have owned cats than dogs.

Households with only one cat were likely to have obtained it from either friends, relatives, or neighbours (41%), or as strays (20%). 33% of households with only one dog obtained it from friends, relatives, or neighbours and 26% obtained it from a breeder. Households with more than one cat or dog were likely to have obtained their second pet from the litter of an existing or previous pet. There was a higher proportion of pedigree dogs (43%) than pedigree cats (11%). Half of the households who owned a pedigree dog or cat obtained it from a breeder.

Nearly half of Australian households did not keep cats or dogs. The most common reason given for not keeping cats or dogs was that they were too much bother (22%). 19% of households did not have cats or dogs because of the terms of their lease and 15% said it restricted other activities.

82% of households had previously owned a cat or dog. 74% of households who did not currently have pets had previously kept a cat or dog. 12% of households with cats or dogs had never kept them before.

Responsibilities of owning a pet

The responsibility of owning a pet can be large in financial terms as well as in time expended on their care. One of the largest initial outlays is having a pet immunised and neutered. In 1994, three-quarters of the domestic cats in Australia had been neutered,

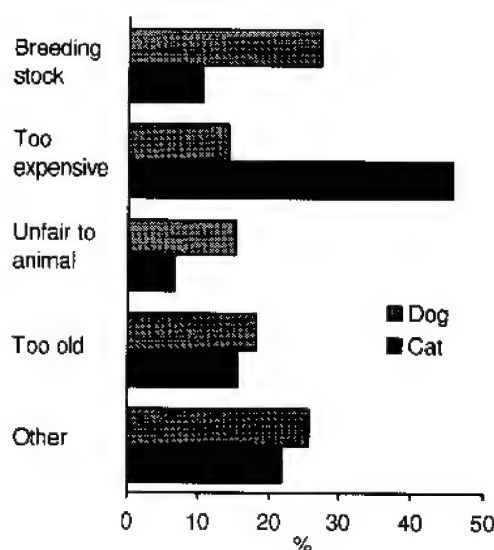
compared to just over half of the dogs. The Australian Capital Territory had the highest proportions of neutered cats and dogs, and Tasmania had the lowest.

The most common reason why households had not had their cat neutered was the expense (46%). For dogs, the most common reason was that they were to be used for breeding (27%).

Unless cats are neutered they have great potential for rapid increase in population numbers. Cats can have three litters a year, with an average of five kittens per litter¹. The rapid reproduction of cats in urban areas contributes to the large numbers of stray cats that are put down by animal welfare agencies each year.

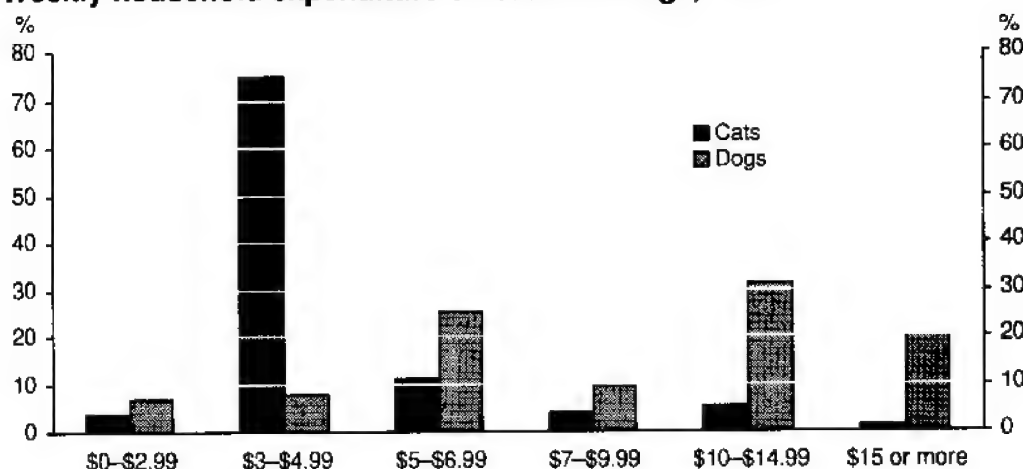
Another large cost involved in owning a pet is feeding. Australians spent \$36.3 million per

Reasons why households have not had their cat or dog neutered, 1994



Source: Population Survey Monitor

Weekly household expenditure on cats and dogs, 1994



Source: Population Survey Monitor

week on feeding and caring for their cats and dogs in 1994. Households with only cats spent on average \$6 per week to feed and care for each cat, compared to \$10 per week spent on each dog by households with only dogs. 85% of cats were fed commercial pet food, compared to 70% of dogs. Of the cats and dogs fed specially prepared fresh food, 22% of the cats and 57% of the dogs were pedigree.

Australian households also spent 2.5 million hours caring for, grooming and exercising their cats and dogs. Households who kept only cats spent on average 38 minutes per day caring for, grooming and exercising pedigree cats and 25 minutes per day on non-pedigree cats. Dogs take more time to care for, and in particular, to exercise. Households with only dogs spent on average 50 minutes per day caring for, grooming and exercising their dog.

An important responsibility for pet owners is controlling their cat's or dog's behaviour, especially when children are around. Children under four years old are at higher risk of being bitten by a dog or cat than older children. This possibly reflects the fact that younger children are more likely than older children to be at home with the family pet. A recent study by the National Injury Surveillance Unit² indicated that children aged 2-4 years were the highest risk group, with dog and cat bite injuries amounting to 2% of all injuries. Less than 1% of all injuries to children under 1 year old were by cats and dogs with dogs responsible for 87% of them. Most of the injuries occurred at home, bites were the most common injury and the head was the most frequently injured part of the body. The Victorian Injury Surveillance

System reported in 1992³ that a quarter of dog bite injury cases occurred in public areas.

Environmental concerns

The Australian Nature Conservation Agency estimates that the average domestic cat kills about 25 native animals a year. This implies about 75 million native animals are destroyed by domestic cats each year¹.

One way to stop cats from hunting is to stop them from roaming. In 1994, only 26% of domestic cats were confined both during the day and night, compared to 88% of dogs. Cat curfews are now being considered as a means of reducing the number of native animals killed. The Shire of Sherbrooke in Victoria was the first shire in Australia to have introduced a local law to control cats¹. The *Cat and Dog Management Act 1994* was proclaimed as South Australian law in March 1995.

Stray cats and dogs can be a considerable nuisance to householders and a potential source of disease to their own pets. 36% of households said that stray dogs and/or cats were a problem on their property. South Australia had the largest proportion of households with stray cat problems (26%) and the Northern Territory had the largest proportion with stray dog problems (18%).

The scale of the problem of stray and dumped animals is well known to the RSPCA. Their shelters received 104,192 animals in 1993-94, 10% less than in the previous financial year.

These animals included 43,762 dogs and 42,126 cats. 19% of the dogs were reclaimed and 50% were put down. In contrast, 3% of

Neutered and stray cats and dogs, 1994

State	Neutered cats	Neutered dogs	Households with stray cat or dog problem		
			Cats only	Dogs only	Cats and dogs
	%	%	%	%	%
NSW	70.8	47.0	19.3	6.9	6.3
Vic.	78.5	57.5	23.3	5.9	7.3
Qld	70.8	49.4	16.5	10.7	8.5
SA	76.9	50.1	25.5	6.0	6.0
WA	79.5	56.8	21.0	8.1	9.8
Tas.	67.0	42.6	17.5	13.6	9.5
NT	91.6	51.4	18.5	18.0	3.6
ACT	93.5	58.7	19.7	12.0	11.6
Australia	75.0	51.4	20.5	7.7	7.4

Source: Population Survey Monitor

cats were reclaimed and 74% were put down. In 1993-94 there were about 20% fewer dogs and cats received than in 1992-93. There were a further 18,304 other animals surrendered which included possums, birds, lizards, sheep, goats and fairy penguins⁴.

Endnotes

- 1 Australian Nature Conservation Agency (1994) *Cats in Australia*.
- 2 National Injury Surveillance Unit (1994) *Injuries to children aged less than 12 months from dogs and cats*.
- 3 Victorian Injury Surveillance System (1992) *Hazard*.
- 4 RSPCA Australia (1995) *1000 pets put down every week by RSPCA* RSPCA Media Release.



Population..... 174

Population composition; population growth; population projections.

Health..... 177

Health status; causes of death; health services and expenditure.

Work..... 180

Labour force; employment and unemployment.

Caution

Statistics for countries other than Australia (unless otherwise stated) presented in this chapter have been reproduced from international statistical compendia. National statistical systems differ from country to country and therefore caution should be exercised when comparing international data. Details of national differences can be found in the country notes in the source publications.



Country	Reference year	Total population	0-14 years	15-64 years	65 years and over
		'000	%	%	%
Australia	1993	17 843	21.7	66.8	11.5
Canada	1993	27 755	20.8	67.3	11.9
China	1993	1 205 181	27.3	66.7	6.0
France	1993	57 379	20.0	65.5	14.5
Greece	1993	10 208	18.1	67.2	14.7
Hong Kong	1993	5 845	19.7	70.7	9.6
Indonesia	1993	194 617	34.2	61.6	4.2
Italy	1993	57 826	16.0	69.0	15.0
Japan	1993	124 959	17.3	69.7	13.0
Korea (Republic of)	1993	44 508	24.1	70.8	5.1
Malaysia	1993	19 239	38.2	58.0	3.8
New Zealand	1993	3 487	22.9	66.0	11.0
Papua New Guinea	1993	4 149	40.0	57.4	2.6
Singapore	1993	2 798	22.7	71.2	6.1
Sweden	1993	8 692	18.4	64.1	17.6
UK	1993	57 826	19.4	64.9	15.6
USA	1993	257 840	21.8	65.6	12.7
Viet Nam	1993	70 902	37.6	57.6	4.8

Source: World Health Organisation (1994) *World Health Statistics Annual 1993*



Population growth

Country	Reference year	Annual average growth rate	Reference year	Annual rate of natural increase(a)	Crude birth rate(a)	Crude death rate(a)	Reference year	Total fertility rate
		%		no.	no.	no.		no.
Australia	1985-92	1.5	1992	7.8	15.1	7.1	1992	1.9
Canada	1985-92	1.2	1991	8.0	15.2	7.3	1990	1.8
China	1985-92	1.5	1985-90	15.0	21.6	6.6	1990	2.4
France	1985-92	0.6	1992	3.8	12.9	9.1	1990	1.8
Greece	1985-92	0.5	1991	0.4	10.0	9.6	1990	1.5
Hong Kong	1985-92	0.9	1991	6.9	11.9	4.9	1990	1.2
Indonesia	1985-92	2.1	1985-90	19.2	28.6	9.4	1990	3.5
Italy	1985-92	n.a.	1991	0.2	9.9	9.7	1990	1.3
Japan	1985-92	0.4	1991	3.2	9.9	6.7	1991	1.5
Korea (Republic of)	1985-92	1.0	1989	9.3	14.9	5.5	1990	1.7
Malaysia	1985-92	2.6	1985-90	26.3	31.9	5.6	1990	4.0
New Zealand	1985-92	0.8	1992	9.4	17.4	8.0	1992	2.1
Papua New Guinea	1985-92	2.0	1985-90	22.6	34.2	11.6	1990	5.3
Singapore	1985-92	1.8	1992	12.5	17.6	5.1	1992	1.7
Sweden	1985-92	0.5	1992	3.2	14.2	10.9	1991	2.1
UK	1985-92	0.3	1991	2.5	13.7	11.2	1991	1.8
USA	1985-92	1.0	1992	7.5	16.0	8.5	1990	1.9
Viet Nam	1985-92	2.1	1985-90	22.3	31.8	9.5	1990	4.2

(a) Per 1,000 population.

Source: United Nations (1994) 1992 Demographic Yearbook



Population projections

Country	Population			Median age			0-14 years			65 years and over		
	2000	2010	2025	2000	2010	2025	2000	2010	2025	2000	2010	2025
	million	million	million	years	years	years	%	%	%	%	%	%
Australia(a)	19.6	22.0	25.2	34.5	36.4	38.3	21.5	21.2	18.9	11.5	12.3	16.7
Canada	30.4	34.1	38.4	36.2	37.9	39.9	20.4	19.6	17.9	12.4	13.3	18.6
China	1 309.7	1 409.9	1 539.8	29.5	33.9	37.9	26.3	21.0	19.0	6.9	8.0	12.6
France	58.8	60.0	60.8	37.3	39.8	42.5	19.3	18.1	16.7	15.6	16.0	21.2
Greece	10.3	10.3	10.1	39.1	41.8	45.4	15.7	16.1	15.6	17.4	19.2	22.2
Hong Kong	6.1	6.3	6.4	36.8	41.1	46.2	17.8	16.5	14.5	11.3	12.2	22.6
Indonesia	218.0	245.3	283.3	24.7	28.4	33.3	31.3	26.1	22.6	5.1	6.4	9.1
Italy	58.1	58.3	56.2	39.2	42.4	47.2	15.1	16.2	14.4	17.0	18.9	22.3
Japan	128.1	130.6	127.0	40.1	42.2	45.9	16.4	16.9	15.1	16.2	20.1	24.4
Korea (Republic of)	46.9	49.3	50.3	31.4	36.0	41.2	21.9	20.1	17.2	6.4	8.8	14.8
Malaysia	22.3	26.1	31.3	22.5	25.7	31.6	35.2	28.8	23.4	4.1	5.1	8.3
New Zealand	3.7	4.0	4.3	33.0	35.6	37.8	23.4	22.2	19.0	11.3	11.9	16.3
Papua New Guinea	4.9	6.0	7.8	20.2	21.6	25.2	39.0	36.8	30.3	2.6	2.7	4.0
Singapore	3.0	3.2	3.3	34.8	38.6	41.8	21.6	18.5	16.9	7.3	9.6	19.2
Sweden	9.0	9.3	9.5	38.6	40.0	40.7	20.0	19.5	17.2	16.7	17.3	20.9
UK	58.8	59.7	60.3	37.3	40.0	41.4	19.9	18.7	17.0	15.4	15.8	19.4
USA	275.3	296.1	322.0	35.5	37.4	39.5	21.7	20.0	17.8	12.3	12.8	18.5
Viet Nam	81.5	97.1	117.0	22.4	24.9	29.9	35.1	31.5	24.5	5.2	4.9	7.1

(a) United Nations projections for Australia may not agree with ABS projections due to differences in assumptions and methodology.

Source: United Nations (1993) *World Population Prospects 1992*



Health status

Country	Reference year	Infant mortality rate(a)	Reference year	Life expectancy at birth	
				Males	Females
		no.		years	years
Australia	1992	7.0	1991	74.4	80.3
Canada	1991	6.8	1985-87	73.0	79.8
China	1985-90	32.0	1985-90	68.0	70.9
France	1991	7.3	1990	72.8	80.9
Greece	1991	8.3	1980	72.2	76.4
Hong Kong	1991	6.4	1990	74.6	80.3
Indonesia	1985-90	75.0	1985-90	58.5	62.0
Italy	1991	8.3	1989	73.5	80.0
Japan	1991	4.4	1991	76.1	82.1
Korea (Republic of)	1985-90	25.0	1989	66.9	75.0
Malaysia	1985-90	17.0	1985-90	67.5	71.6
New Zealand	1992	7.3	1989	72.4	78.3
Papua New Guinea	1985-90	59.0	1985-90	53.2	54.7
Singapore	1992	5.0	1991	73.5	78.0
Sweden	1991	6.2	1991	74.9	80.5
UK	1991	7.4	1988-90	72.7	78.3
USA	1992	8.4	1989	71.8	78.6
Viet Nam	1985-90	47.0	1979	63.7	67.9

(a) Per 1,000 live births.

Source: United Nations (1994) *1992 Demographic Yearbook*

**Standardised death rates^(a) for selected causes of death**

Country	Reference year	Malignant neoplasms (cancer)	Ischaemic heart disease	Cerebro-vascular disease (stroke)	Motor vehicle traffic accidents	Suicide and self-inflicted injury ^(b)	All causes
		no.	no.	no.	no.	no.	no.
Australia	1992	107.9	92.6	33.6	10.2	10.4	410.2
Canada	1991	116.8	84.1	25.4	12.2	11.4	413.6
China	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	1991	118.4	33.8	28.9	15.5	14.5	411.0
Greece	1991	93.1	51.5	69.8	19.5	2.6	424.3
Hong Kong	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	1990	121.1	52.2	48.3	13.4	5.2	435.9
Japan	1992	95.5	18.7	43.0	9.8	11.5	347.8
Korea (Republic of)	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Malaysia	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	1991	126.6	110.9	40.8	19.2	13.0	479.0
Papua New Guinea	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	1991	115.8	89.7	62.1	8.7	10.4	496.2
Sweden	1990	96.9	99.4	36.3	7.9	12.4	411.6
UK	1992	128.1	114.2	44.8	7.4	6.5	461.7
USA	1990	117.7	96.1	26.7	17.5	10.4	489.0
Viet Nam	. .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Standardised death rates are the overall death rates per 100,000 population that would have prevailed in a standard population if it had experienced at each age the death rates of the population being studied. The standard population used in this table is the World Health Organisation new world standard population. Standardised death rates for Australia presented in the Health chapter of this publication or elsewhere in ABS publications are not comparable due the use of a different standard population and different reference periods.

(b) It is generally acknowledged that suicides are under-reported as a cause of death. The degree of under-reporting varies from country to country, partly for social and cultural reasons, but also because of differences in legal requirements and administrative procedures in arriving at a verdict of suicide.

Source: World Health Organisation (1994) *World Health Statistics Annual 1993*



Health services and expenditure

Country	Reference year	Health expenditure as % of GDP	Health expenditure per capita at PPP ^(a)	Reference year	Doctors per 1,000 population	Reference year	Acute hospital beds per 1,000 population
		%	\$US '000		no.		no.
Australia	1992	7.9	1.3	1991	2.3	1992	4.5
Canada	1992	10.8	2.1	1991	2.2	1989	5.0
China	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
France	1992	9.4	1.7	1991	2.7	1990	5.2
Greece	1992	5.4	0.3	1990	3.4	. .	n.a.
Hong Kong	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
Indonesia	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
Italy	1992	8.5	1.5	1989	1.3	. .	n.a.
Japan	1992	7.0	1.4	1990	1.6	. .	n.a.
Korea (Republic of)	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
Malaysia	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
New Zealand	1992	7.7	1.1	1989	1.9	. .	n.a.
Papua New Guinea	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
Singapore	. .	n.a.	n.a.	. .	n.a.	. .	n.a.
Sweden	1992	7.9	1.3	1991	2.9	1990	3.9
UK	1992	7.1	1.2	1990	1.4	1986	2.8
USA	1992	14.0	3.2	1990	2.3	1991	3.5
Viet Nam	. .	n.a.	n.a.	. .	n.a.	. .	n.a.

(a) PPP (purchasing power parities) are the rates of currency conversion which eliminate the differences in price levels between countries.

Source: Organisation for Economic Co-operation and Development (1993) OECD Health Systems: facts and trends 1960-1991



Labour force

Country	Reference year	Economically active population(a)	Participation rate of persons aged 15 years and over		
			Persons	Men	Women(b)
		'000	%	%	%
Australia	1993	8 618.7	62.6	73.7	51.8
Canada	1993	13 946.0	65.2	73.3	57.5
China	. .	n.a.	n.a.	n.a.	n.a.
France	1993	25 756.2	55.0	63.1	47.5
Greece	1992	4 034.3	48.3	63.5	34.2
Hong Kong	1993	2 872.9	62.5	78.1	46.5
Indonesia	1992	79 451.4	56.6	70.9	42.7
Italy	1991	24 245.0	50.1	65.4	35.8
Japan	1993	66 140.0	63.8	78.0	50.3
Korea (Republic of)	1992	19 383.0	60.9	75.3	47.3
Malaysia	1990	6 685.1	63.5	81.9	45.2
New Zealand	1993	1 653.0	63.3	73.2	53.9
Papua New Guinea	. .	n.a.	n.a.	n.a.	n.a.
Singapore	1993	1 635.7	64.5	79.1	50.6
Sweden	1993	4 320.0	79.1	81.0	77.3
UK	1993	28 271.0	62.4	72.7	52.8
USA	1993	128 042.0	63.3	71.5	55.7
Viet Nam	. .	n.a.	n.a.	n.a.	n.a.

(a) For most countries the economically active populations are aged 15 years and over. However, the age range varies for some countries: Greece and Italy — 14 years and over; Indonesia — 10 years and over; Malaysia — 15–64 years; Sweden — 16–64 years; UK — 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

(b) Activity rates for females are frequently not comparable internationally since, in many countries, relatively large numbers of women assist on farms or in other family enterprises without pay. There are differences between countries in the criteria for determining the extent to which such workers are counted as economically active.

Source: International Labour Office (1994) *Year Book of Labour Statistics*

Employment and unemployment^(a)

Country	Reference year	Employment	Reference year	Unemployment	Unemployment rate
		'000		'000	%
Australia	1993	7 680	1993	939	10.9
Canada	1993	12 383	1993	1 562	11.2
China	1992	594 320	1992	3 603(b)	2.3(b)
France	1993	22 024	1993	2 911	11.6
Greece	1992	3 685	1992	350	8.7
Hong Kong	1993	2 816	1993	57	2.0
Indonesia	1992	78 104	1992	2 199	n.a.
Italy	1992	21 609	1992	2 799	11.5
Japan	1993	64 500	1993	1 660	2.5
Korea (Republic of)	1993	19 203	1993	551	2.8
Malaysia	1990	6 685	1992	45	n.a.
New Zealand	1993	1 496	1993	157	9.5
Papua New Guinea	. .	n.a.	. .	n.a.	n.a.
Singapore	1993	1 592	1993	44	2.7
Sweden	1993	3 964	1993	356	8.2
UK	1993	25 381	1993	2 891	10.2
USA	1993	119 306	1993	8 734	6.7
Viet Nam	. .	n.a.	. .	n.a.	n.a.

(a) For most countries the employed and unemployed populations are aged 15 years and over. However, the age range varies for some countries: China — all ages; Greece and Italy — 14 years and over; Indonesia — 10 years and over; Malaysia (employed only) — 15–64 years; Sweden — 16–64 years; UK and USA — 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

(b) Urban areas only.

Source: International Labour Office (1994) *Year Book of Labour Statistics*

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